

Zhanwen Liu  
Liang Liu  
*Editors*

# Essentials of Chinese Medicine

Volume 1

 Springer

# Essentials of Chinese Medicine

Zhanwen Liu

Editor

Liang Liu

Associate Editor

Warner Fan

English Consultant

Shiping Zhang

Associate English Consultant

**Editorial Team**

Baixiao Zhao

Chunguang Xie

Cunku Chang

Haihong Zhu

Hongyi Hu

Kui Wang

Lanzheng Li

Songping Luo

Yuxiang Zhai

Zhaoxiang Bian

# Essentials of Chinese Medicine

Volume 1

Foundations of Chinese Medicine



Springer

## Editor

Zhanwen Liu  
Dept. Health Preservation & Rehab  
Beijing University of Chinese Medicine  
11 Beisanhuan East Road  
Chaoyang 100029, Beijing  
PR China  
liuzhanwen4569@sina.com

## Associate Editor

Liang Liu  
School of Chinese Medicine  
Hong Kong Baptist University  
Kowloon Tong  
Kowloon  
Hong Kong/PR China  
liuliang@hkbu.edu.hk

ISBN 978-1-84882-589-5 e-ISBN 978-1-84882-590-1

DOI 10.1007/978-1-84882-590-1

Springer Dordrecht Heidelberg London New York

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

Library of Congress Control Number: 2009926514

©Springer-Verlag London Limited 2009

Apart from any fair dealing for the purposes of research or private study, or criticism or review, as permitted under the Copyright, Designs and Patents Act 1988, this publication may only be reproduced, stored or transmitted, in any form or by any means, with the prior permission in writing of the publishers, or in the case of reprographic reproduction in accordance with the terms of licenses issued by the Copyright Licensing Agency. Enquiries concerning reproduction outside those terms should be sent to the publishers.

The use of registered names, trademarks, etc., in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant laws and regulations and therefore free for general use.

The publisher makes no representation, express or implied, with regard to the accuracy of the information contained in this book and cannot accept any legal responsibility or liability for any errors or omissions that may be made.

*Cover design:* eStudio Calamar S.L.

Printed on acid-free paper

Springer is part of Springer Science+Business Media ([www.springer.com](http://www.springer.com))

# Foreword

*The Essentials of Chinese Medicine* is a text book intended for international students who wish to gain a basic understanding of Chinese Medicine (CM) at the university level. The idea of writing such a text was originated from the Sino-American Consortium for the Advancement of Chinese Medicine (SACACM), which was founded in February 2000. In 1995, the British Hong Kong Administration set up a Preparatory Committee for the Development of Chinese Medicine to look into ways of bringing Chinese medical practice and herbal trade under proper control and regulation. After the reunification of Hong Kong with mainland China in 1997, the Government of the Hong Kong Special Administrative Region continued the efforts to uplift the practice of CM to a fully professional level through legislation.

To help bring up a new generation of professional CM practitioners, the Hong Kong Baptist University (HKBU) obtained approval from the Government's university funding authority to develop a School of Chinese Medicine to prepare students who will meet the future professional requirements through public examinations. In order to establish itself quickly as a rigorous provider of university level CM education, HKBU sought alliance with eight major CM universities in the Chinese Mainland, and one US university which was interested in developing CM education within its medical college. As a result, the Consortium known as SACACM was formed, with ten founding institutions from Beijing, Shanghai, Nanjing, Shandong, Guangzhou, Chengdu, Heilongjiang, Hong Kong, and the United States. (The University of Macau and the Macao University of Science and Technology joined the Consortium 2 years later.)

One of the first projects the Consortium decided to pursue was the writing of a high quality CM text book in English to be endorsed by the member institutions as the foundation for the study of traditional Chinese medicine. The Beijing University of Traditional Chinese Medicine, being one of the oldest and better developed institutions in the field, was nominated to be the coordinating university for the project, with the active assistance of the State Administration of Traditional Chinese Medicine of China (SATCM). The initial funding for the project was provided by the Hong Kong Baptist University and the Ohio University of the USA. An editorial committee was formed to decide on the general coverage and level of the text, and each of the member universities of CM were requested to nominate their senior professors to write the assigned chapters according to their fields of specialty. These

authors were to prepare their scripts in both Chinese and English with the help of the Editor. After the English version of the text was checked against the Chinese version for accuracy and consistency, it was sent to an expert who is well versed in both Chinese and Western Medicine and at the same time fluent in both the Chinese and English languages at the mother tongue level. The expert was invited to go over the entire text line by line to make sure that both the language style and the terms used are understood by the international students whose native language is English.

The above steps looked innocent enough, but the execution of the entire process was extremely time consuming and tedious. It has also proven to be a very meaningful, if not “ground-breaking,” move which makes the text truly different from publications of similar nature. I am happy that after 9 years of hard work and perseverance this text is finally ready for the press. I do hope that when it comes out, it will prove to be a significant contribution to the education of CM internationally.

Founding Chair, SACACM  
February 2009

Daniel C. W. Tse

# Preface

“Health for all” is still an important task for the World Health Organization (WHO) to accomplish in the twenty-first century. The accomplishment of this task requires mutual cooperation and common efforts of various medical sciences, which includes Chinese medicine. WHO has increasingly emphasized the development of traditional medicine and has made great efforts to promote its development. Because traditional medicine is deeply rooted in history and culture, it is part of the traditions of a country and employs healing practices handed down from generation to generation.

Large portions of the population in a number of developing countries still rely mainly on traditional practitioners, including traditional birth attendants, herbalists, and bone-setters, and local medicinal plants to satisfy their primary health care needs. Although modern medicine is now available in many countries, traditional medicine has maintained its popularity because of its historical and cultural impact. People believe in it, and it is still effective against many common diseases, has few side effects, and is economically preferable to modern medicine.

Nowadays, the modern medical model is changing. It is gradually shifting from its original medical model of biomedicine into a physiological–psychological–sociological–medical model, which emphasizes that the people, the natural environment, ecological conditions and society are all aspects of a united whole. With the transformation into the new medical model, alternative medicine and therapies are developing very rapidly. The study of Chinese Medicine (CM) in the west is both timely and challenging. It is timely because of public demand for traditional medicines to be provided by safe, efficient and competent practitioners. It is challenging because of the greater demand for science-based treatment and evidence-based practice. These perspectives suggest that the integration of orthodox medicine with complementary or alternative medicine is a historical trend in the world medical scene. Therefore, the role of CM in medical treatment and health-care will certainly become even more important in the world medical scene in the twenty-first century.

CM is an integral part of Chinese culture. Over the centuries, various activities and aspects of the practice of CM have made tremendous contributions to the prosperity of the Chinese nation. Its good reputation resulted from its great vitality is

demonstrated by the fact that when compared with other traditional medicine its clinical application has never declined over the past several thousand years.

CM appears to have a bright future in the world. There appears to be a growing reliance on it by people everywhere. This seems to be an irresistible historical trend. Working together to develop CM will not only be in line with the developing trend in the world, but also will fundamentally solve existing problems and increase competitive advantages. Collaboration among universities will benefit cultural exchange, the blending of the East and the West, and the global development of CM. However, much work needs to be done in order to meet the health requirements of human beings and to promote the course of internationalization of CM, especially the compilation of textbooks suitable for medical students in western countries in addition to international readers.

With the encouragement of the State Administration of Traditional Chinese Medicine of China, the compilation of this textbook series was initiated by the Sino-American Consortium for the Advancement of Chinese Medicine which was made up of the Ohio University in Athens, Ohio, Beijing University of CM, Chengdu University of TCM, China Academy of Chinese Medical Sciences, Guangzhou University of TCM, Heilongjiang University of TCM, Hong Kong Baptist University, Nanjing University of TCM, Shandong University of TCM, and Shanghai University of TCM. The Beijing University of CM was the lead institution of this project. It gathered experts from the member institutions to compile the series and translate it into English which is now known as *Essentials of Chinese Medicine*. This textbook series contains three volumes: Volume 1 ***Foundations of Chinese Medicine***; Volume 2, ***Clinical Fundamentals in Chinese Medicine***; and Volume 3 ***Essentials of the Clinical Specialties in Chinese Medicine***. These volumes systematically introduce the basic theories, the diagnostic methods, the therapeutic methods based on symptom differentiation, and the knowledge of principles of health preservation and rehabilitation. They explain the basic methods and theories of acupuncture and moxibustion, as well as expounding upon 154 kinds of Chinese herbs; each Chinese medicinal herb is illustrated. The textbooks also introduce 84 Chinese herbal formulas and 11 associated formulas commonly used in clinical practice. Furthermore, it elucidates treatments of commonly and frequently encountered diseases in internal medicine, surgery, gynecology, pediatrics, ophthalmology and otorhinolaryngology.

In the arrangement of contents and compilation, the following features characterize this textbook series:

### 1. Emphasis on the basic knowledge of CM

Medical students who want to learn CM, especially students in western countries, need to adapt CM to Western medical terms and conditions, but this adaptation can only take place on the solid foundation of the theories of CM. There can be no mastery of CM without a true understanding of the theories and practice of CM. The first volume introduces the terminology and methodology of Chinese medicine in order to improve the critical thinking of medical students

and practitioners. It also contains a detailed explanation of the basic theories. The second volume covers the fundamentals of clinical practice. The more solid the foundation is, the easier it will be to have a better understanding and mastery of CM

## 2. Concise and systematic content

On the basis of developments of CM in education and research in the past, great efforts have been made to highlight the essence of CM through accurate exposition and to introduce them to the world. These textbooks systematically introduce the basic theories, diagnostic methods, acupuncture skills, knowledge of Chinese herbs, knowledge of formulas, as well as clinical application. Mastery of these textbooks will lay a foundation for the further study of CM.

## 3. Suitability for teaching and self-study

In this textbook series, at the end of most chapters guidance is provided on the aims of study, the objectives of study and exercises for review. The structure combines the features of textbooks and modular handbooks. Therefore, it is highly suitable for self-study by medical students.

## 4. Reinforcing effects of illustrations

To facilitate the understanding of CM, the textbook series contains many illustrations. There are black and white photographs, line graphs, tables in the text with necessary indexes, color photographs of the tongue, and color photographs of 151 Chinese herbs. These illustrations provide a better appreciation of CM and promote its learning.

## 5. Case studies

In Volume 3 and Part III of Volume 2 each section contains a successful case study. These case studies enhance the understanding of CM.

## 6. Standardization

This textbook series is reasonable in structure and distinct in categorization. Most of the technical terms of CM have been standardized in translation with an index glossary. Simultaneously, habitual terms used in countries using English as the mother tongue have been considered in the translation and compilation.

In order to ensure academic standards and an accurate English translation of this textbook series, we invited international experts of the CM profession and the English language to review and revise the English translation.

Professor Zheng Souzeng, the former President of Beijing University of Chinese Medicine, was the Director of the Compilation Board. Dr. Warner Fan of the United States is the English Consultant who has gone through the whole text to ensure the language consistency throughout the text.

International advisors invited include Ryan Thompson from Canada, Ioannis Solos from Greece and Georgia Ross from the United States of America. They and others have given much help in the compilation of this series of books. We are grateful to them for very useful suggestions and revisions.

## Note on Conventions Used in the Text

Several conventions of usage have been adopted in the English version of this textbook, and are intended to make the students' task easier.

A number of concepts in traditional Chinese medicine cannot be adequately translated. The terms representing them are therefore presented in transliteration, using the *Pinyin* system. Where the term is already in common usage but in this text are used as technical terms, they are capitalized. Examples include Qi, Yin, Yang, the Five Elements (Metal, Wood, Water, Fire, Earth), the six exogenous pathogenic evil (Wind, Heat or Summer Heat, Cold, Phlegm, Dampness, Fire) and their endogenous counterparts, all the acupoints, the four Levels (Defensive, Qi, Nutritive, and Blood), etc. Where there is no risk of confusion between ordinary and technical usage, they are not capitalized. Examples include the zang and fu organs, the sanjiao, etc.

In the discussion of CM *materia medica*, all materials are referred to as "herbs," even though many are derived from animal or mineral sources. This is the time-honored approach, as comparable medieval European books are often entitled "Herbals." In traditional CM, herbs are seldom prescribed alone. A prescription is referred to here as a "formula."

In addition, the name of each formula is given as one word, in *pinyin* transliteration of the Chinese name. In Chapter 7 of volume 2, which contains the main descriptions of the herbs, each entry is headed by the name of the herb in *pinyin* with its botanical name in brackets. The first line then gives the actual Chinese name in characters and the herb's pharmaceutical name (in Latin). When an herb is mentioned in the text elsewhere, at its first appearance it is followed in brackets by its genus name if it is described in Chapter 7 of volume 2 or by its botanical name, both genus and species, if it is not. It is hoped that doing so will make it easier for the student who chooses to look it up in the Appendix III: Herbs or in Chapter 7 of volume 2. When the herb is mentioned again in the same passage, only the name in *pinyin* is given.

Strictly speaking, the clinical manifestations of an illness include both symptoms and signs. The symptoms are supposed to be what the patient feels and perceives subjectively, whereas the signs are what the physician finds objectively. Take fever, for example. The symptom is the hot sensation, especially in the face and head, that the patient feels, whereas the sign is the higher than normal temperature as measured with a thermometer. In accordance with the recent trend towards simplification, however, in this text the word “symptoms” encompasses both symptoms and signs.

# Acknowledgements

## **International Advisors**

Bruce D. Dublin (USA)  
Daniel C. W. Tse (HK, PRC)  
Daniel K. C. Shao (HK, PRC)  
Edward Gotfried (USA)  
Georgia Ross (USA)  
Ioannis Solas (Greece)  
Qichang Zheng (Macau, PRC)  
Robert Glidden (USA)  
Rosalind Chan (HK, PRC)  
Ryan Thompson (Canada)  
Shouzensheng Zheng (PRC)  
Xiaoping Wang (PRC)  
Xiaozhuo Chen (USA)  
Yanling Fu (PRC)  
Yitao Wang (Macau, PRC)  
Zaizeng Jiang (PRC)  
Zhongzhen Zhao (HK, PRC)

## **Member-Institutions of The Sino-American Consortium for the Advancement of Chinese Medicine**

Beijing University of Chinese Medicine (PRC)  
Chengdu University of Traditional Chinese Medicine (PRC)  
China Academy of Chinese Medical Sciences (PRC)  
Guangzhou University of Traditional Chinese Medicine (PRC)  
Heilongjiang University of Traditional Chinese Medicine (PRC)  
Hong Kong Baptist University (HK, PRC)  
Macau University of Science and Technology (Macau, PRC)  
Nanjing University of Traditional Chinese Medicine (PRC)  
Ohio University, Athens (USA)  
Shandong University of Traditional Chinese Medicine (PRC)  
Shanghai University of Traditional Chinese Medicine (PRC)  
University of Macau (Macau, PRC)

**Institute for the Advancement of Chinese Medicine (A wholly owned subsidiary of Hong Kong Baptist University)**

David W.F. Fong (HK, PRC)

Carry P.C. Yu (HK, PRC)

In grateful acknowledgement to Dr. Daniel C. W. Tse, President Emeritus of Hong Kong Baptist University and Founding Chair of the Sino-American Consortium for the Advancement of Chinese Medicine, who initiated this Textbook writing project in Year 2000 and persevered to keep the project moving until it was completed.

# **Note on Organization of Volume 1**

This volume is composed of two parts. Part I, in six chapters, introduces the basic theories of CM. Part II, in five chapters, introduces the basic knowledge and skills of diagnostics and therapeutic principles of CM.

Part I describes the basic theories of CM. It covers a wide range of contents and is at the very core of the basic theoretical system of CM. It contains six chapters, including the formation of the CM theoretical system and its philosophical basis, CM methodology, the structure and physiological functions of human body, the basic substances of the vital activities, etiology in CM, and pathological mechanisms.

Part II describes diagnostics and therapeutic principles in CM. It elucidates the theory and methods of CM in diagnosing and differentiating pathological conditions, and analyzing clinical manifestations. It covers the concept of diagnostics in CM and the principal diagnostic methods. It closes with two chapters, one on the principles of therapeutics and one on the theories and principles of health preservation.

We hope this volume will assist the student and practitioner in gaining a solid foundation for learning CM.

# Contents

<b>Foreword</b> .....	v
<b>Preface</b> .....	vii
<b>Acknowledgements</b> .....	xiii
<b>Note on Organization of Volume 1</b> .....	xv
<b>Contributors</b> .....	xxix
<b>Part I Basic Theories of Chinese Medicine</b>	
<b>Chapter 1 Formation of the Chinese Medicine Theoretical System and Its Philosophical Basis</b> .....	3
Section 1 Formation and Development of Chinese Medical Theory .....	3
I Initial Formation of the CM Theoretical System .....	3
II Development and Enhancement of CM Theoretical System .....	5
Section 2 Philosophical Basis of Chinese Medicine .....	9
I Unity of Qi .....	9
1 Concept of Qi and Its Main Contents .....	9
2 Features of Qi Transformation .....	10
II Theory of Yin–Yang .....	11
1 Pervasiveness and Changeability of Yin–Yang .....	13
2 Basic Contents of Yin–Yang Theory .....	13
3 Application of Yin–Yang Theory in CM .....	17
III Theory of Five Elements .....	21
1 Basic Concept of Five Elements .....	21
2 Basic Contents of Theory of Five Elements .....	21
3 Application of Theory of Five Elements in CM .....	27
Guidance for Study .....	31
I Aim of Study .....	31
II Objectives of Study .....	31
III Exercises for Review .....	32

<b>Chapter 2</b>	<b>Chinese Medicine Methodology</b>	33
Section 1	View of Life in CM	33
I	Essence is the Basis of Life	33
II	Union of Body and Vitality	34
III	Vital Qi Connecting with Universe	34
Section 2	Concept of Illness in CM	35
I	Illness Can Be Studied	35
II	Functional Imbalance	35
III	Struggle of Genuine-Qi and Evil-Qi	36
Section 3	Holism in CM	36
I	Human Body as Organic Whole	37
II	Unity of Human Body and Universe	38
III	Unity of the Human Body and Social Circumstances	39
Section 4	Inquiry Methodology in CM	39
I	Holistic Systemic Method	40
II	Classification by Analogy	40
III	Inferring the Interior from the Exterior	41
Section 5	Symptom Analysis in CM	42
I	Treatment Selection Based on Symptom Analysis	42
II	Treating Same Illness with Different Methods and Treating Different Illnesses with Same Method	43
Section 6	Health Preservation in CM	44
I	Correspondence between Human Body and Nature; Conforming to Nature	44
II	Preserving Both Body and Vitality; Nurturing <i>Zang-Fu</i> Functions	45
III	Activity and Quiescence	46
	Guidance for Study	48
I	Aims of Study	48
II	Objectives of Study	48
III	Exercises for Review	48
<b>Chapter 3</b>	<b>Structure and Functions of the Human Body</b>	49
Section 1	Visceral Manifestation Theory	49
I	Formation of Visceral Manifestation Theory	49
II	Characteristics of Visceral Manifestation Theory	50
Section 2	<i>Zang</i> Viscera	51
I	Heart (Including Pericardium)	52
1	Physiological Functions of Heart	52
2	Relationship of Heart to Other Organs and Tissues	54
II	Lung	56
1	Physiological Functions of Lung	56
2	Relationship of Lung to Other Organs and Tissues	59
3	Throat as Gateway for Lung	60

III	Spleen .....	60
1	Physiological Functions of Spleen .....	60
2	Relationship of Spleen to Other Organs and Tissues .....	63
IV	Liver .....	64
1	Physiological Functions of Liver .....	64
2	Relationship of Liver to Other Organs and Tissues....	68
V	Kidney (Including the Vital Gate) .....	69
1	Physiological Functions of Kidney .....	69
2	Relationship of Kidney to Other Organs and Tissues .....	74
Section 3	<i>Fu</i> Viscera and Irregular Organs .....	78
I	<i>Fu</i> Viscera .....	78
1	Gallbladder .....	78
2	Stomach.....	80
3	Small Intestine.....	81
4	Large Intestine.....	83
5	Urinary Bladder .....	83
6	Sanjiao .....	84
II	Irregular Organs .....	87
1	Brain .....	87
2	Uterus .....	88
Section 4	Relationships between the <i>Zang</i> and <i>Fu</i> Viscera .....	89
I	Relationships among <i>Zang</i> Viscera.....	90
1	Heart and Lung.....	90
2	Heart and Spleen .....	90
3	Heart and Liver.....	91
4	Heart and Kidney.....	93
5	Spleen and Lung .....	94
6	Lung and Liver .....	95
7	Lung and Kidney .....	96
8	Liver and Spleen .....	97
9	Liver and Kidney .....	98
10	Spleen and Kidney .....	99
II	Relationships between <i>Zang</i> and <i>Fu</i> Viscera.....	99
1	Heart and Small Intestine .....	100
2	Lung and Large Intestine .....	101
3	Spleen and Stomach.....	101
4	Liver and Gallbladder .....	102
5	Kidney and Urinary Bladder .....	103
III	Relationships among <i>Fu</i> Viscera .....	103
	Guidance for Study .....	105
I	Aims of Study .....	105
II	Objectives of Study .....	105
III	Exercises for Review .....	106

<b>Chapter 4</b>	<b>Basic Substances of Vital Activities</b>	107
Section 1	Qi	107
	I Concept of Qi	107
	II Formation of Qi	107
	III Physiological Actions of Qi	108
	1 Promoting Action	108
	2 Warming Action	108
	3 Defending Action	108
	4 Stabilizing Action	109
	5 Transforming Action	109
	IV Patterns of Qi Movement	109
	V Classification and Distribution of Qi	110
	1 Genuine Qi	110
	2 Thoracic Qi	111
	3 Nutritive Qi	111
	4 Defensive Qi	112
	5 Summary	113
Section 2	Blood	113
	I Basic Concept of Blood	113
	II Formation of Blood	113
	1 Food Essence	113
	2 Kidney-Essence	115
	III Physiological Actions	115
	IV Blood Circulation	115
Section 3	Body Fluids	116
	I Basic Concept of Body Fluids	116
	II Formation, Distribution and Excretion of Body Fluids	117
	1 Formation of Body Fluids	117
	2 Distribution and Excretion of Body Fluids	117
	III Physiological Actions of Body Fluids	119
	1 Moistening–Nourishing Action	119
	2 Component of Blood	119
Section 4	Relationship Among Qi, Blood and Body Fluids	119
	I Relationship between Qi and Blood	119
	1 Actions of Qi on Blood	119
	2 Actions of Blood on Qi	120
	II Relationship between Qi and Body Fluids	120
	1 Actions of Qi on Body Fluids	120
	2 Action of Body Fluids on Qi	121
	III Relationship between Blood and Body Fluid	121
Section 5	Transformation of Qi	122
	I Basic Concept of Qi Transformation	122
	II Motive Force for Qi Transformation	123
	1 Kidney's Primordial Yang as Source of Motive Force	123
	2 Motive Force for Qi Transformation Is in Qi Itself	123

III	Dynamics of Qi Transformation .....	124
IV	Main Patterns of Qi Transformation .....	125
1	Influence of Spleen and Stomach on Qi Transformation .....	125
2	Influence of Lung and Liver on Qi Transformation ...	126
3	Influence of Heart and Kidney on Qi Transformation .....	126
4	Transformation of Sanjiao-Qi .....	127
	Guidance for Study .....	128
I	Aim of Study .....	128
II	Objectives of Study .....	128
III	Exercises for Review .....	128
<b>Chapter 5</b>	<b>Etiology in Chinese Medicine .....</b>	<b>131</b>
Section 1	External Causes of Illness .....	132
I	Climatic Pathogenic Evils .....	132
1	Introduction .....	132
2	Nature and Pathogenic Characteristics of Climatic Pathogenic Evils .....	133
II	Pestilential Pathogenic Evils .....	142
Section 2	Internal Causes of Illness .....	144
I	Passions as Causes of Illness .....	144
1	Relationship between Passions and Qi-Blood of Zang-Fu Viscera .....	144
2	Characteristics of Passions .....	145
II	Diet, Maladjustment of Work and Rest .....	147
1	Impairment due to Improper Diet .....	147
2	Maladjustment of Work and Rest .....	149
Section 3	Other Causes of Illness .....	150
I	Traumatic Injuries .....	150
II	Pathological Products That Lead to Illnesses .....	151
1	Phlegm .....	151
2	Rheum .....	153
3	Blood Stasis .....	154
4	Stones .....	157
III	The Five Endogenous Pathogenic Evils .....	158
1	Endogenous Wind .....	158
2	Endogenous Cold .....	160
3	Endogenous Dampness .....	161
4	Endogenous Dryness .....	161
5	Endogenous Fire .....	162
	Guidance for Study .....	163
I	Aim of Study .....	163
II	Objectives of Study .....	163
III	Exercises for Review .....	163

<b>Chapter 6</b>	<b>Pathology in Chinese Medicine</b>	165
Section 1	Pathogenesis	165
I	Relationship between the Genuine Qi and the Evil Qi to Pathogenesis	166
1	Deficiency of Genuine Qi Is the Basis of Pathogenesis	166
2	Evil Qi Is Required to Cause Disease	166
II	Internal and External Environment and Pathogenesis	167
1	Constitution	167
2	Psychological State	168
3	Living Circumstances	168
4	Nutrition and Sports	169
III	Transmission of Illnesses	169
1	Exterior–Interior Transmission	170
2	Up–Down Transmission	170
3	Transmission Among Zang–Fu Viscera	170
Section 2	Mechanisms of Pathological Change	172
I	Rise and Fall of Evil Qi and Genuine Qi	172
1	Deficiency and Strength	172
2	Progression and Outcome of Illness	173
II	Imbalance of Yin–Yang	174
1	Yin or Yang Excess	175
2	Yin or Yang Deficiency	176
3	Mutual Injury to Yin and Yang	177
4	Mutual Repellency of Yin and Yang	178
5	Depletion of Yang or Yin	179
III	Disturbance of Qi and Blood	180
1	Disturbance of Qi	180
2	Disturbance of Blood	182
3	Disharmony of Qi and Blood	184
IV	Abnormal Metabolism of Body Fluids	185
1	Insufficiency of Body Fluids	186
2	Impeded Distribution and Excretion of Body Fluids	186
3	Disturbance of Relationship Among Fluids, Qi and Blood	187
	Guidance for Study	189
I	Aim of Study	189
II	Objectives of Study	189
III	Exercises for Review	189

## **Part II Diagnostic Methods and the Therapeutic Principles of Chinese Medicine**

<b>Chapter 7</b>	<b>Approach to Chinese Medical Diagnosis</b>	193
Section 1	Diagnostic Approach in CM	193
I	Four Methods of Diagnosis	193
II	Symptom Analysis and Differential Diagnosis	194

Section 2	Principles of Diagnosis in CM .....	195
I	Approaching Patient Holistically .....	195
II	Comprehensive Analysis of All Symptoms .....	195
III	Diagnosis by Symptom Analysis and Differential Diagnosis .....	196
	Guidance for Study .....	196
I	Aims of Study .....	196
II	Objectives of Study .....	197
<b>Chapter 8</b>	<b>Diagnostic Methods .....</b>	<b>199</b>
Section 1	Inspection .....	199
I	Mental Status .....	199
II	Skin Color .....	200
	1 Characteristics of Normal Skin Color .....	201
	2 Characteristics of Abnormal Skin Color .....	201
	3 Diagnostic Significance of Colors .....	202
III	General Appearance .....	204
	1 Robustness or Weakness .....	205
	2 Obesity or Thinness .....	205
IV	Tongue .....	205
	1 Basic Tongue Diagnosis .....	206
	2 Contents of Tongue Diagnosis .....	206
	3 Clinical Significance .....	215
V	Skin .....	217
	1 Macular Rash .....	217
	2 Papular Rash .....	218
	3 Chickenpox .....	219
	4 Miliaria .....	219
	5 Spider Angioma .....	219
	6 Scaling .....	220
	7 Erosion .....	220
	8 Ulceration .....	220
	9 Eczema .....	221
	10 Fissures .....	221
	11 Abscesses, Nodules, Furuncles, Folliculitis .....	221
VI	Inspection of Infant's Finger Venules .....	222
VII	Excretions and Secretions .....	223
	1 Vomitus .....	224
	2 Sputum .....	224
	3 Nasal Discharge .....	225
	4 Saliva .....	225
	5 Spittle .....	226
Section 2	Auscultation and Olfaction .....	226
I	Auscultation .....	226
	1 Voice .....	226

	2	Respiratory Sounds .....	227
	3	Cough .....	228
	II	Olfaction .....	228
Section 3		Pulse-Taking and Palpation .....	229
	I	Pulse-Taking .....	229
	1	Formation of Pulse .....	229
	2	Clinical Significance of Pulse-Taking .....	230
	3	Location of Pulse-Taking .....	230
	4	Pulse-Taking Technique .....	230
	5	Normal Pulse .....	232
	6	Abnormal Pulses .....	232
	II	Palpation .....	249
	1	Palpation of the Skin .....	249
	2	Palpating the Anterior Fontanelle .....	250
	3	Palpating the Neck .....	250
	4	Palpating the Chest and Flanks .....	251
	5	Palpating the Abdomen .....	252
	6	Palpating Shu Acupoints .....	253
Section 4		Inquiring .....	253
	I	General Approach and Points of Attention .....	254
	II	Contents of Inquiring .....	254
	1	General Data .....	254
	2	Chief Complaint .....	254
	3	Present Illness .....	255
	4	Past History .....	256
	5	Personal Lifestyle and Preferences .....	256
	6	Family History .....	256
	III	Clinical Significance of Some Common Symptoms .....	257
	1	Chills and Fever .....	257
	2	Pain .....	259
	3	Perspiration .....	261
	4	Diet .....	262
	5	Defecation .....	263
	6	Urination and Urine .....	265
	7	Sleep .....	266
	8	Common Symptoms in Internal Medicine .....	267
	9	Common Symptoms Specific to Women .....	271
	10	Common Symptoms of Sense Organs .....	275
		Guidance for Study .....	276
	I	Aims of Study .....	276
	II	Objectives of Study .....	277
	III	Exercises for Review .....	277

<b>Chapter 9</b>	<b>Differential Diagnosis</b>	279
Section 1	Diagnosis by Eight Fundamentals	279
I	Diagnosis of Exterior–Interior	280
1	Exterior Syndrome	280
2	Interior Syndrome	281
II	Diagnosis of Cold–Heat	281
1	Cold Syndromes	282
2	Heat Syndromes	282
3	True and False Cold–Heat Syndromes	283
III	Diagnosis of Deficiency–Strength	284
1	Deficiency Syndromes	284
2	Strength Syndromes	285
IV	Diagnosis of Yin–Yang Syndromes	286
1	Yin–Yang Syndromes	286
2	Yin–Yang Deficiency Syndromes	287
3	Yin–Yang Depletion Syndromes	287
Section 2	Diagnosis by Qi and Blood	288
I	Qi Syndromes	288
1	Qi Deficiency	288
2	Qi Sinking	289
3	Abnormal Qi Movement	289
4	Qi Stagnation	290
II	Blood Syndromes	290
1	Blood Insufficiency	290
2	Blood Stasis	291
3	Heat in Blood	291
4	Cold in Blood	291
III	Simultaneous Qi and Blood Syndromes	292
1	Qi Stagnation and Blood Stasis	292
2	Deficiency of Both Qi and Blood	292
3	Qi Deficiency with Bleeding	293
4	Massive Blood Loss with Qi Depletion	293
Section 3	Diagnosis by Visceral Organs	293
I	Heart Illnesses	294
1	Deficiency of Heart–Qi	294
2	Deficiency of Heart–Yang	294
3	Insufficiency of Heart–Blood	295
4	Deficiency of Heart–Yin	295
5	Blazing of Heart–Fire	296
6	Blockage of Heart Meridians	296
7	Phlegm Clogging Heart Orifices	296
8	Phlegm–Fire Disturbing Heart	297
II	Lung Illnesses	297
1	Deficiency of Lung–Qi	297
2	Deficiency of Lung–Yin	298

	3	Wind-Cold Binding Lung .....	298
	4	Wind-Heat Invading Lung .....	299
	5	Heat Accumulation in Lung .....	299
	6	Phlegm-Dampness Obstructing Lung .....	299
III		Spleen Illnesses .....	299
	1	Deficiency of Spleen-Qi .....	300
	2	Deficiency of Spleen-Yang .....	300
	3	Sinking of Middle-Qi .....	300
	4	Spleen Not Controlling Blood .....	301
	5	Cold-Dampness Encumbering Spleen .....	301
	6	Dampness-Heat Lodging in Spleen .....	301
IV		Liver Illnesses .....	302
	1	Stagnation of Liver-Qi .....	302
	2	Upward Flaming of Liver-Fire .....	303
	3	Insufficiency of Liver-Blood .....	303
	4	Deficiency of Liver-Yin .....	303
	5	Abnormal Rise of Liver-Yang .....	304
	6	Liver-Wind Stirring in Interior .....	304
	7	Cold Congealing Liver Meridians .....	305
	8	Dampness-Heat in Liver Meridians .....	305
V		Kidney Illnesses .....	306
	1	Deficiency of Kidney-Yang .....	306
	2	Deficiency of Kidney-Yin .....	306
	3	Deficiency of Kidney-Essence .....	307
	4	Failure of Kidney-Qi to Solidify .....	307
	5	Failure of Kidney to Accept Qi .....	308
VI		Stomach Illnesses .....	308
	1	Deficiency of Stomach-Yin .....	308
	2	Food Retention .....	308
	3	Cold in Stomach .....	309
	4	Heat in Stomach .....	309
VII		Gallbladder Illnesses .....	309
VIII		Large Intestine Illnesses .....	310
	1	Dampness-Heat in Large Intestine .....	310
	2	Fluid Deficiency in Large Intestine .....	310
	3	Chronic Diarrhea in Large Intestine Insufficiency .....	311
IX		Small Intestine Illnesses .....	311
X		Urinary Bladder Illnesses .....	311
Section 4		Diagnosis by Six Meridians .....	312
	I	Taiyang Meridian .....	312
	1	Taiyang Meridian .....	313
	2	Taiyang Fu-Organ .....	313
	II	Yangming Meridian .....	313
	III	Shaoyang Meridian .....	314
	IV	Taiyin Meridian .....	314

	V	Shaoyin Meridian .....	314
	VI	Jueyin Meridian .....	315
Section 5		Diagnosis by Four Phases .....	315
	I	Defensive Phase .....	316
	II	Qi Phase .....	316
	III	Nutritive Phase .....	316
	IV	Blood Phase .....	317
Section 6		Diagnosis by Sanjiao .....	317
	I	Upper-Jiao Illness .....	317
	II	Middle-Jiao Illness .....	318
	III	Lower-Jiao Illness .....	318
		Guidance for Study .....	319
	I	Aims of Study .....	319
	II	Objectives of Study .....	319
	III	Exercises for Review .....	319
<b>Chapter 10</b>		<b>Therapeutics .....</b>	<b>321</b>
Section 1		Principles of Therapeutics .....	321
	I	Early Treatment to Prevent Progression of Illness .....	321
		1 When Ill Prevent Complications .....	321
		2 Secure Regions Not Affected by Illness .....	322
		3 During Convalescence Prevent Complications .....	322
	II	In Treatment Attack the Root of Illness .....	323
		1 Treating Root and Treating Appearance .....	323
		2 Standard Treatment and Contrary Treatment .....	325
		3 Supplemental Principles to “in Treatment Attacking the Root” .....	329
	III	Treatment in Accordance with Person, Local and Seasonal Conditions .....	332
		1 Adjustment to Seasonal Conditions and Timing .....	333
		2 Adjustment to Locale .....	334
		3 Adjustment to Person .....	334
Section 2		Common Therapeutic Methods .....	337
	I	Commonly-Used Eight Principle Methods .....	337
		1 Diaphoresis (Exterior-Release) .....	337
		2 Emesis .....	338
		3 Catharsis (Purgation) .....	339
		4 Mediation (Harmonization) .....	340
		5 Cooling (Heat-Clearing) .....	340
		6 Warming .....	341
		7 Dissipation (Reduction, Elimination) .....	342
		8 Restoration (Tonification) .....	343
	II	Other Methods of Treatment .....	344
		1 Qi Regulation .....	344
		2 Blood Regulation .....	345

3	Astringency (Consolidation).....	346
4	Orifice-Opening (Resuscitation).....	346
5	Anticonvulsant Therapy (Wind Suppression).....	347
III	Combinations of Methods .....	348
1	Diaphoresis and Catharsis .....	348
2	Cooling and Warming.....	348
3	Attack and Restoration.....	349
4	Dissipation and Restoration .....	349
	Guidance for Study .....	349
I	Aim of Study .....	349
II	Objectives of Study .....	349
III	Exercises for Review .....	349
<b>Chapter 11</b>	<b>Health Preservation .....</b>	<b>351</b>
Section 1	Principles of Health Preservation .....	351
I	Conforming to Nature .....	351
II	Unity of Body and Mind .....	352
III	Activity and Quiescence .....	352
Section 2	Common Methods of Health Preservation .....	352
I	Cultivation of Mind .....	353
1	Regulating Mind .....	353
II	Conserving Essence to Preserve Health .....	355
1	Self Restraint to Conserve Essence.....	355
2	Sexual Hygiene.....	356
III	Diet Regulation .....	356
1	Balancing the Five Flavors.....	357
2	Regular Times for Meals.....	357
3	Eating Clean and Bland .....	357
	Guidance for Study .....	358
I	Aim of Study .....	358
II	Objectives of Study .....	358
III	Exercises for Review .....	358
<b>Appendix I:</b>	<b>Tongue Pictures .....</b>	<b>359</b>
<b>Index .....</b>		<b>367</b>

# Contributors

**Baixiao Zhao, M.D., Ph.D.** School of Acupuncture, Beijing University of Chinese Medicine, Beijing, P.R. China

**Chunguang Xie, Ph.D.** Chengdu University of Traditional Chinese Medicine, Chengdu, P.R. China

**Cunku Chang, M.D.** Department of History of Chinese Medicine, Heilongjiang University of Traditional Chinese Medicine, Haerbin, P.R. China

**Haihong Zhu, M.B.** Department of Traditional Chinese Medicine, Affiliated Hospital of Shandong University of Traditional Chinese Medicine, Jinan, P.R. China

**Hongyi Hu, Ph.D.** Academic Affair Office, Shanghai University of Traditional Chinese Medicine, Shanghai, P.R. China

**Kui Wang, Ph.D.** China Academy of Chinese Medical Sciences, Beijing, P.R. China

**Lanzheng Li, Ph.D.** Guangzhou University of Traditional Chinese Medicine, Guangzhou, P.R. China

**Liang Liu, M.D., Ph.D.** School of Chinese Medicine, Hong Kong Baptist University, Hong Kong, P.R. China

**Shiping Zhang, M.B., Ph.D.** School of Chinese Medicine, Hong Kong Baptist University, Hong Kong, P.R. China

**Songping Luo, Ph.D.** Guangzhou University of Traditional Chinese Medicine, Guangzhou, P.R. China

**Warner Fan, M.D.** Previous Colonel Doctor, Medical Corp., United States Air Force, U.S.A.

**Yuxiang Zhai, Ph.D.** Department of Science of Epidemic Febrile Disease, Nanjing University of Traditional Chinese Medicine, Nanjing, P.R. China

**Zhanwen Liu, B.S.** Department of Health Preservation and Rehabilitation, Beijing University of Chinese Medicine, Beijing, P.R. China

**Zhaoxiang Bian, Ph.D.** School of Chinese Medicine, Hong Kong Baptist University, Hong Kong, P.R. China

# **Chapter 1**

## **Formation of the Chinese Medicine Theoretical System and Its Philosophical Basis**

### **Section 1 Formation and Development of Chinese Medical Theory**

Chinese Medicine (CM) has had a history of several thousand years. It is the crystallization of the rich experiences in the Chinese people's long struggle against diseases. The many years have fostered the gradual formation of a unique and systematic medical theory. It is an important component of the people's cultural legacy, and it has made enormous contributions to the Chinese people's healthcare and prosperity. Because of its unique Oriental characteristics and remarkable therapeutic effects, CM enjoys not only a high reputation but has also been spreading to the wider world. It will play an increasing role in promoting the health and well-being, as well as the longevity, of humankind.

#### **I Initial Formation of the CM Theoretical System**

The origin of CM can be traced back to remote antiquity in China. From the time humans first appeared on earth there have been medical practice and activities of healthcare. For instance, in ancient times early humans moistened their bruises with saliva, extracted thorns that lodged in their flesh, and applied leaves or mud on their wounds. They tasted herbs, adopting some and rejecting others. They used massage to relieve pain from the body. They splinted their broken bones with tree branches. When bitten by a venomous animal they themselves or others sucked the poison from the wound.

Following the development of productive forces and progress of human society, people began to know more about their own life activities and to accumulate rich medical knowledge day by day. In Chinese history, the period from the Warring States to the Qin and Han dynasties (fifth century BC to first century AD) was a time of essential change, when the politico-economic structure of society transitioned from a slavery system to a feudal one. It was a time of intellectual freedom and political uncertainties, during which "the various schools of thought and their

exponents rose in swarms and contended one against another heatedly.” It was in this atmosphere that astronomy, including the calendar, mathematics, biology, geography, anthropology, psychology, and agricultural technology all began to flourish. Meanwhile, the theories of Yin–Yang and of the Five Elements, as well as the concept of the vital essence, gradually matured and became extensively used to interpret natural phenomena and to express their regularities as laws.

Under the guidance of these natural sciences, there appeared an early medical classic – the *Huangdi Internal Classic*, or the *Internal Classic* for short. The *Internal Classic* explained the laws of life and the unity of the body with the natural world. It provided a systematic discussion of anatomy – the viscera and the meridians – physiology and pathology. It also expounded the diagnosis, prevention and treatment of diseases. In deliberately combining natural science with philosophy, the *Internal Classic* provided a deep interdisciplinary approach toward medicine and medical practice. It is aptly regarded as the initial formulation of CM theory. The *Internal Classic* was considered advanced in its time, and it contributed greatly to medicine in the ancient world. In particular, in the aspect of blood circulation it put forward the viewpoint of “the heart governs the blood vessels,” and realized that “blood travels in the vessels endlessly like a circle.” It may be noted that these descriptions occurred more than 1,000 years before Harvey, who in the 17th century was the first to describe blood circulation in Western medicine.

After the *Internal Classic*, the *Classic on Medical Problems* appeared before the Han dynasty (206 BC–220 AD). It is a very important canon that augments and supplements the difficult questions posed by the *Internal Classic*. It is an important contribution to the development of the basic theory of CM, especially its elaboration of the theories of pulse study, visceral manifestations, meridians and so on, thereby providing a theoretical basis for the principles of treatment and the establishment of prescriptions.

In the last years of the Eastern Han dynasty (25–220 AD), the eminent physician Zhang Zhongjing built upon the foundation of the *Internal Classic*, the *Classic on Medical Problems* and other medical works. Distilling this rich tradition he combined it with his own practical experiences. He wrote an important masterpiece, the *Treatise on Cold-Attack and Miscellaneous Diseases*. Subsequently, the work was rearranged by Wang Shuhe, a famous physician of the Jin dynasty (265–420 AD), and divided into two books, namely the *Treatise on Cold-Attack* and the *Essentials from the Golden Cabinet*. The *Treatise on Cold-Attack* created the framework for the clinical analysis of diseases by the Six Meridians and established the foundation for the differentiation of disease states by the Eight Principles of Diagnostics. The 113 prescriptions in the book further unified the basic theory and bedside experience and led to a deeper understanding of the relationship in the CM medical system among theory, strategy, prescription and herbs. The *Essentials from the Golden Cabinet* used the theory of disease processes in the *zang* and *fu* viscera to formulate the classification and diagnosis of diseases. It recorded over 40 kinds of diseases, and further advanced the study of disease etiology. Both works exerted great influence upon the subsequent development of CM.

**Table 1.1** The initial formation of CM theoretical system

Classification	Time	Representative Classics	Relevant Contents
Theoretical foundation	Fourth to first BC	<i>Huangdi Internal Classic</i>	Correspondence between man and Nature; Yin–Yang, Five Elements; organ manifestation theory; etiology and pathological mechanisms; diagnostic methods and treatment rules; principles of health preservation
	First AD	<i>Classic on Medical Problems</i>	Elaboration, supplementation of medical theories of <i>Internal Classic</i>
Clinical medicine model	End Second AD	<i>Treatise on Cold-Attack and Miscellaneous Diseases</i>	Diagnosis, treatment of exogenous diseases according to Six Meridians theory; diagnosis, treatment of miscellaneous diseases; organ manifestation theory
<i>Materia Medica</i>	First to second AD	<i>Shennong’s Herbal Classic</i>	Basic theory of Chinese herbs; properties, flavors and classification of 365 Chinese herbs

During the same era, there was further accumulation in the knowledge of *materia medica*. **Shen Nong’s Herbal Classic** is the oldest monograph on *materia medica* extant in China. This work summarized descriptions of 365 distinct Chinese herbs, and classified them into three grades: superior, medium and inferior. It systematically summed up the knowledge and experiences of the people of the Qin and Han dynasties, and also exerted important influence on the subsequent development in the field of Chinese *materia medica*.

In summary, the era from pre-Qin to the two Han dynasties was a key period in the formation of CM. During this time, the fragmented and isolated experiences were collected and raised to a systematic theory. This activity laid a solid foundation for the development of Chinese medicine (see [Table 1.1](#)).

II Development and Enhancement of CM Theoretical System

Throughout the Jin, Sui, Tang and Song dynasties, the CM theoretic system continued to develop, to deepen and to improve from many sources.

During the Jin dynasty, Wang Shuhe brought together all the knowledge about the pulse, augmented it with new content and wrote his monograph on sphymology, the **Pulse Classic**. He summarized the 24 kinds of pulse profiles relating to the principal

diseases and systematized the theory of the pulse, thereby making an indispensable contribution to sphygmology. Also during the Jin dynasty, Huangfu Mi compiled his *Classic of A's and B's of Acupuncture and Moxibustion*. The oldest extant monograph in China on acupuncture and moxibustion, it summarized all the knowledge attained in the previous ages. During the Sui dynasty (581–618 AD) Chao Yuanfang and his colleagues compiled their *General Treatise on the Causes and Symptoms of Diseases*. This was CM's first monograph of pathology. It described the etiology and pathological mechanisms of 1,739 kinds of symptoms and signs, and was an essential reference for clinical practice.

During the Tang dynasty (618–907 AD) pharmacology in CM made great strides. Su Jing and others compiled the *Newly Revised Materia Medica*. Also known as the *Tang Herbal*, it was the world's first pharmacopoeia, appearing over 800 years before the *Newlonpaw Pharmacopoeia* of Europe. The *Prescriptions Worth a Thousand Gold*, written by Sun Simiao, and the *Medical Secrets of an Official*, compiled by Wang Tao, were both great comprehensive medical references. They collected a large number of therapeutic techniques and effective formulas.

During the Song dynasty (960–1127 AD), Chen Ziming compiled the *Complete Effective Prescriptions for Women*. It was an important work of CM gynecology and obstetrics with rich and comprehensive contents; and it was an important source of information for many generations of physicians. The *Key to Therapeutics of Children's Diseases*, written by Qian Yi, was the earliest monograph on CM pediatrics. It recorded many effective formulas for treating children's diseases.

Throughout the Jin, Yuan, Ming and Qing dynasties, many physicians built their own experiences and understanding, on the foundation of inherited theory and practical experiences, and were able to gain their own individual insights. The situation became one of many physicians putting forth their own theories and methods of treatment from a variety of perspectives. The competitiveness stimulated and strengthened CM theory and produced many breakthrough advances.

Among the many diverse and distinctive schools of medical thought, the most representative are those of Liu Wansu, Li Gao, Zhang Congzheng, and Zhu Zhenheng. Later scholars have honored them as The Four Great Schools of Jin-Yuan (1115–1368 AD).

Liu Wansu extended the theories of pathology and Qi of the *Internal Classic*, and propounded his theory of Fire-Heat. He asserted that most diseases resulted from injury by the Fire evil, so that treatment should be based principally on inducing cooling. Later scholars labeled his teachings as the Cold-Cool School.

Zhang Congzheng postulated that all diseases were caused by exogenous evils. He vigorously advocated basing treatment principally on the expulsion of such disease evils, and opposed the excessive use of herbs that tonify. His teachings became known as the School of Purgation.

Li Gao held that "diseases ensue when the spleen and stomach are injured internally." Treatment should therefore emphasize nourishing the spleen and the stomach. His teachings became known as the School of Earth-Strengthening, or the School of Spleen-Stomach.

Zhu Zhenheng put forward the theory that “Yang is generally excessive while Yin is generally deficient” and described “depression.” In treatment he tended to promote drugs that relieve depression or nourish Yin. Later physicians honored him and called his teachings the School of Yin-Nourishment.

During the subsequent Ming dynasty (1368–1644 AD), Zhang Jingyue advocated the theory of warm-tonification of the spleen and the kidney, and warned that cold or cool drugs should only be used with caution. His teachings became known as the School of Warm-Tonification.

These schools not only enriched CM theory but also expanded the contents of clinical diagnosis and treatment. Their achievements have had a profound and lasting influence upon physicians of later generations.

During the Ming and Qing dynasties, three features characterized the advances in CM.

One was the development in the treatment of diseases caused by exogenous Heat-evil. As a result of Wu Youke, Ye Gui, Wu Tang and many others, this led to the formation of the School of Heat Diseases. In this school, the diagnosis and treatment of diseases caused by Heat were raised to a higher standard. Wu Youke also wrote the *Treatise on Pestilence* and propounded a theory of the pestilence-evil. He was the first to offer a relatively complete study of the etiology and therapeutics of contagious diseases of Heat, and laid the foundation of today’s theory of diseases of Heat. During the Qing dynasty (1644–1911 AD), Ye Gui wrote the *Treatise on Febrile Diseases*, Wu Tang wrote the *Treatise on the Differentiation and Treatment of Febrile Diseases*, Xue Shengbai wrote the *Treatise on Dampness-Heat Diseases*, and Wang Mengying wrote *A Compendium on Febrile Diseases*. These books, and others, systematically brought together all information from the Ming and Qing dynasties concerning contagious diseases caused by external disease evils and their pathology. They significantly enriched the CM theoretical system and enhanced its development (Table 1.2).

The second feature was the marked development in the study of Chinese *materia medica* and pharmacology. The *Compendium of Materia medica*, compiled by Li Shizhen in the Ming dynasty, recorded and annotated 1,892 kinds of herbs, and was the most comprehensive summarization of *materia medica* in the 16th century. It occupied an important place in the world as well as in China. Also in the Ming dynasty, Zhu Su and others compiled the *Prescriptions for Universal Relief*. This monumental work described 61,139 formulas; it is still a treasure-trove for research on prescriptions.

The third feature was the appearance of a very large number of comprehensive treatises, such as Wang Kengtang’s *Standards of Diagnosis and Treatment*, Gong Tingxian’s *Longevity and Life Preservation*, Zhang Jingyue’s *Complete Works of Jingyue*, Wu Qian’s *Golden Mirror of Medical Works*, and others. This tendency toward synthesis was the culmination of the vast progress over many years and in the many fields within CM.

Since the founding of modern China, there has been much further advancements. The achievements can be seen in many aspects. The standards in the diagnosis and treatment of commonly seen diseases have been further raised. The integration of the

**Table 1.2** Development and enhancement of theoretical system of CM

Dynasty	Representative Classic	Relevant Contents
Jin dynasty	Wang Shuhe, <i>Pulse Classic</i>  <i>A–B classic of Acupuncture and Moxibustion</i> , compiled by Huangfu Mi	Twenty-four kinds of pulse profiles relating to the principal diseases Acupuncture and moxibustion
Sui dynasty	<i>General Treatise on the Causes and Symptoms of Diseases</i> , compiled by Chao Yuanfang	Etiology and pathological mechanisms of 1,739 kinds of symptoms
Tang dynasty	<i>Newly Revised Materia Medica</i> , compiled by Su Jing et al. Sun Simiao, <i>Prescriptions Worth a Thousand Gold</i>	Oldest pharmacopoeia in China Compositions of large number of medicinal herbs and effective formulas
Song dynasty	<i>The Complete Effective Prescriptions for Women</i> , compiled by Chen Ziming Qian Yi, <i>Key to Therapeutics of Children's Diseases</i>	Important work on CM Gynecology and Obstetrics Earliest monograph on children's diseases, including large number of effective herbs and formulas
Ming dynasty	Li Shizhen, <i>Compendium of Materia Medica</i> Zhang Jiebin, <i>Complete Works of Jingyue</i>	1,892 kinds of Chinese herbs Summary of clinical treatments; theory of warming-tonifying spleen-kidney
Qing dynasty	<i>Treatise on Pestilence</i>  Ye Gui, <i>Treatise on Febrile Diseases</i> Wu Tang, <i>Treatise on the Differentiation and Treatment of Febrile Diseases</i>	Theory of pestilence-evil; etiology and therapeutics of the febrile diseases Diagnosis by the defensive Qi, nutritive and blood levels Theory of diagnosis and treatment by sanjiao

techniques of differential diagnosis from the Western medical tradition with those of traditional CM has produced new perspectives and enhanced therapeutic effectiveness. Attempts at the objectification and standardization of the Four Diagnostic Methods have produced definite results in the study of fundamental principles, such as in organ manifestations, the meridians, etiology of diseases, and pathological mechanisms. In particular, the application of modern scientific methodology to the essence of CM theories has already yielded many promising leads. For example, research in the nature of Yin deficiency and Yang deficiency, Heat and Cold, the kidney and the spleen, as well as the essence of the meridians, has produced objective advances. These have also aroused much interest among medical researchers both in China and abroad. We firmly believe that the study of the CM theoretical system by modern scientific methodology will bring many breakthrough advances, and facilitate the worldwide spread of CM and contribution to the health of all peoples.

## Section 2 Philosophical Basis of Chinese Medicine

The history of scientific development tells us that the development of any science is inextricably linked to philosophy. The systemization and development of the CM theoretical system was deeply influenced by ancient Chinese philosophical thought. To learn and practice CM without understanding this philosophical basis is akin to using antibiotics without understanding physiology, pathology or pharmacology. Doing so will produce only erratic results.

The philosophical background of CM is totally different from that of Western medicine. People in the West are accustomed to the logical mode of thinking, which emphasizes a relationship of clear causality, whereas to learn and practice CM requires a differential mode of approach. The reason is that CM arose out of ancient Chinese society, and its theoretical system was profoundly influenced by the distinctive theories of Qi, of Yin–Yang, and of the Five Elements. These theories not only fostered the formation and development of CM, but also were its philosophical basis. The theories of Yin–Yang and of the Five Elements were the framework used in ancient China to understand and explain natural phenomena.

### I Unity of Qi

The unity of Qi is a fundamental concept in ancient Chinese philosophy. It originated before the Qin dynasty, matured during the Qin and Han dynasties, and expanded and deepened during the subsequent ages. In this way, philosophically it became the framework for comprehending nature.

#### *1 Concept of Qi and Its Main Contents*

The concept of Qi postulates that Qi is the basic substance that constitutes the universe. All objects in this universe are born of the transformation of Qi. Qi is neither abstract nor beyond sensation. It can be perceived through its various forms of existence. The ancients asserted that Qi have two states of existence: that of dispersion and that of condensation. These two states of existence of Qi determine its two modes of human perception: that of having form and that of being formless.

When Qi is in the state of dispersion it is perceived as being formless. This is the state in which it does not occupy any definite space and does not possess a definite and stable form. When it is in the state of condensation it is perceived as having form. In this state it occupies definable space and possesses the definite and stable form of objects. When objects are generated Qi inheres in them. Qi can transform itself from one state to the other. Formless Qi can transform into objects with form, and Qi of objects with form can revert to formlessness. This is to say that diagnostically speaking Qi and the body are unified. In this way, from the macroscopic

perspective the theory of unified Qi explains the basic existence of the myriad things and their interrelationship through Qi transformation. It provides a tool to comprehend the countless diversity of the physical world.

This basic understanding was brought into the study of CM, and gave rise to the medical concept of Qi and its content. Qi is the basic substance that makes up the human body. When condensed, Qi gives form to the organic body; when it is dispersed, the organic body dies. The *Internal Classic* distinguishes two types of Qi, namely Yang-Qi and Yin-Qi. Yang-Qi is characterized by being light, clear, active, ascending and warming. Yin-Qi is characterized by being heavy, murky, quiescent, descending and cooling. Hence, the immense Heaven is formed through the movement and flight of Yang-Qi, whereas the vast Earth is formed through the congealing of Yin-Qi. Because of the interaction between Yang-Qi and Yin-Qi throughout the universe, all the living things and non-living matters, including human beings, animals and plants, appeared in the natural world. The large variety of living things in the natural world results from the mercurial nature of Qi, and from differences in the quantity and in the combinative modes of the two types of Qi.

For example, the so-called evil Qi is but another name for the substance that can injure the human body and cause disease; it is one aspect of natural Qi. Within the human body, there are defensive Qi, nutritive Qi, thoracic Qi, and many other types of Qi. These all participate in the maintenance of the functions of the body and the preservation of life and activity – they all belong to genuine Qi of the human body.

The CM theory of the unity of Qi clarifies the wholeness of the universe and the immense varieties of things in it. It thus lays a simple but scientific foundation capable of resolving complicated and difficult problems encountered in the clinical practice of CM.

## 2 Features of Qi Transformation

In the theory of the unity of Qi, Qi possesses extraordinary energy and is the source of all things. It is characterized by ceaseless motion; indeed, it is this ceaseless motion and change that bring about the enormous variety of distinct things. It means that new things continue to emerge, and to grow from small to large and from weak to strong. Simultaneously, old things pass from vigorous to declining and from strong to weak. The entire process in the universe – the emergence of new things to replace old things – is the result of the motion and transformation of Qi. In CM this ceaseless motion and change of nature are known as the concept of eternal motion.

There are two basic kinds of change in the universe. One is quantitative change; that is, change that is gradual or is not obvious is merely a change in quantity, not in quality. The other is qualitative change; that is, when the quantitative change exceeds a certain limit the quality of the thing also changes, and this brings about the transmutation of one thing into another. *Plain Questions*, a part of the *Internal Classic*, points out clearly the distinction and connection between these two kinds of changes. “The generation of a thing is due to transformation; the degeneration

of a thing is due to transmutation.” Furthermore, “there must be quiescence after excessive motion; extreme Yang will become Yin.” This is precisely the meaning of the old saying: “Once a certain limit is reached, a change to the opposite direction is inevitable.”

Though transformation in nature is very complex it has its own laws to obey. Firstly, the movement and change in the nature of a thing depend on the interaction of Yin-Qi and Yang-Qi. That is to say, the simultaneous unity and opposition of Yin-Qi and Yang-Qi provide the impetus to the movement and change of everything. Secondly, in nature time and space characterize all movement and change. Any movement or change must occur at a specific time and in a specific place. Hence, in the diagnosis and treatment of diseases CM particularly emphasizes the effects of seasonal changes upon the vital activities of the human body. CM also attaches much importance to the diversity and particularity of geographic locations and orientations. From this one can see that there is an intimate relationship between the particulars of space-time and the principles of dynamic changes in the universe.

## II Theory of Yin–Yang

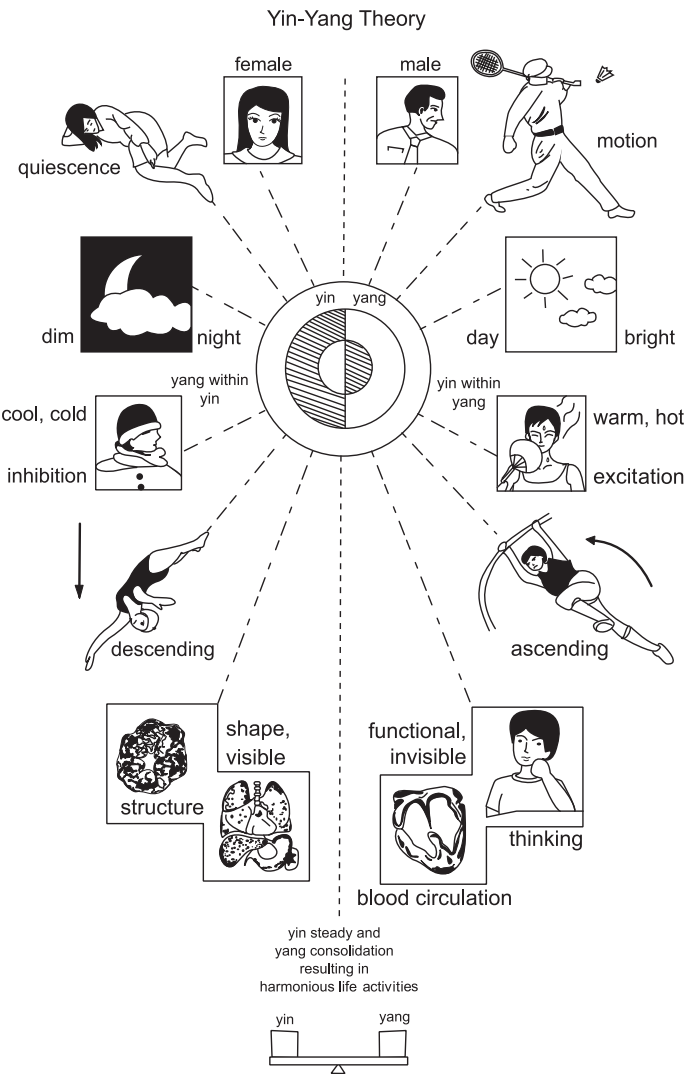
The Yin–Yang theory in ancient China was a worldview and methodology. It was a rational system used by the ancients to understand and explain nature.

In their origin the concepts of Yin and Yang were very simple; they referred to the orientation toward or away from sunlight. The aspect that faced the sun was Yang, and the aspect that faced away from the sun was Yin. Over the years the ancient philosophers observed that in nature many things existed in opposite pairs – for example, the heaven and the earth, the sun and the moon, day and night, hot and cold, bright and dark, living and dead, male and female, etc. Consequently, the meaning and application of Yin–Yang were extended to the concept of two opposites. Thus, anything partaking of the characteristics of the heaven, the sun, warmth, brightness, daytime, clearness, motion, fire, male, generation, etc. is Yang. Anything partaking of the characteristics of the earth, the moon, cold, darkness, nighttime, murkiness, quiescence, water, female, death, etc. is Yin.

Subsequently, Yin and Yang evolved into abstract philosophical concepts, moving away from their original concrete connotation. The Yin–Yang theory postulates not only that Yin and Yang, in both unity and opposition, inhere in all things in the universe, but also that the emergence and change of these things are the result of the interaction of these two opposite yet unified Qi. So it is stated in *Plain Questions*: “Yin–Yang – it is the law of the heaven and the earth, the guiding principle of everything, the parents of change, the root and source of life and death, and the house of spirit.” What this quote clarifies is that the basis and source of every thing and every phenomenon in the universe is Yin–Yang. Moreover, in addition to explaining things and phenomena the theory of Yin–Yang is also a theoretical methodology for observing and analyzing them ([Table 1.3](#) and [Fig. 1.1](#)).

**Table 1.3** Classification form for attributes of Yin and Yang

Property	Space	Time	Season	Temperature	Humidity	Weight	Brightness	State of Movement
Yang	Up, outside	Daytime	Spring, summer	Warm, hot	Dry	Light	Bright	Active, ascending, excited, hyperactive
Yin	Down, inside	Night	Autumn, winter	Cool, cold	Moist	Heavy	Dim	Descending, quiet, inhibited, hypoactive



**Fig. 1.1** Yin–Yang Theory

## 1 *Pervasiveness and Changeability of Yin–Yang*

The pervasiveness of Yin–Yang means that it is not restricted to any specific thing, but is present in every thing and every phenomenon in the universe. Throughout, Yin and Yang stand simultaneously in mutual opposition and in mutual interaction. All things and phenomena evolve and change through the mutual opposition and mutual interaction of Yin and Yang. This is so whether it is the movement of celestial bodies, the alternation of day and night, the succession of the seasons, the changes of cold and hot or warm and cool, or the various organization and functional states of the human body. Nevertheless, it is possible to identify each of these with Yin or with Yang, depending on its nature. In general, all things or phenomena that are warm or hot, ascending, bright, excited, light, dynamic, functional, hyper-functional, etc. are Yang. Those that are cool or cold, descending, dim, depressed, heavy, static, material, hypo-functional, etc. are Yin.

The changeability of Yin–Yang means, firstly, that the Yin or Yang of each thing or phenomenon is not absolute or unchangeable, but can change under certain conditions. For example, in the process of the new replacing the old in the human body, substance can develop the capacity for function and function can turn into substance. This interchangeability of substance and function is what ensures normal vital activities. Secondly, the changeability of Yin–Yang refers to their unlimited divisibility. That is, any aspect of Yin or Yang can be further divided into Yin and Yang. For example, daytime belongs to Yang and night to Yin. However, both daytime and night can also be divided into Yin and Yang. In daytime, morning is Yang within Yang, and afternoon is Yin within Yang. In the night, the first half of the night is Yin within Yin, and the second half of the night is Yang within Yin. Furthermore, Yin within Yang can be subdivided into Yin within Yin within Yang and Yang within Yin within Yang, and so forth. Thus, not only do Yin and Yang pervade in all things and phenomena of the entire universe but the Yin or Yang within each can also be further divided into Yin and Yang. *Plain Questions* states, “Yin and Yang can be divided into ten, and then further down to one hundred, to a thousand, to ten thousand, and to a number so great as to defy calculation; yet in essence all these are but one.”

## 2 *Basic Contents of Yin–Yang Theory*

### i *Opposition and Restraint Between Yin and Yang*

The theory of Yin–Yang holds that two mutually opposite aspects of Qi, Yin and Yang, exist in all things and phenomena in the universe, and that all changes in things and phenomena result from the opposition of Yin and Yang. This mutual opposition refers to their having opposite properties; for example, upper versus lower, external versus internal, activity versus quiescence, exiting versus entering, day versus night, and hot versus cold, etc. Yet, even as they are in mutual opposition Yin

and Yang are also united. Without opposition there can be no unity; and without conflict there can be no synthesis.

Mutual restraint refers to the relationship of mutual inhibition and struggle between Yin and Yang. Since they represent two opposites, each tends to overpower the other.

When either of them is stronger it tends to restrict the opposite, resulting in the weakness of the opposite. Simultaneously, the restricted one tends to fight back to preserve its own strength. It is only through their unending mutual attack, struggle and inhibition that a dynamic equilibrium between them can be maintained.

As example, consider the cyclical sequence of the seasons. Spring warmth, summer heat, autumn coolness and winter cold – these principally result from the mutual restraint by cold and heat. In summer Yang-Qi is abundant, but following the summer solstice Yin-Qi begins to grow and to restrain the hot Yang-Qi. In winter Yin-cold is abundant, but following the winter solstice Yang-Qi returns and restrains the cold Yin-Qi. Thus, the variations in weather of the four seasons are a direct result of the mutual antagonism and struggle between Yin and Yang.

In the case of physiological activities of the human body, under normal conditions it is also the simultaneous unity and mutual opposition of Yin and Yang that maintains the dynamic equilibrium of physiological functions. If for some reason this struggle produces deficiency or excess of either Yin or Yang, the equilibrium will be disturbed and disease can result.

## ii Mutual Dependence and Support Between Yin and Yang

Neither Yin nor Yang can exist without the other. The existence of each requires the other as condition or precondition. Thus, without Yin there would be no Yang, and without Yang there would be no Yin. Without coldness there would be no hotness, and without hotness there would be no coldness. The *Classification Canon*, by Zhang Jiebin of the Ming dynasty, points out: “Yang is born of Yin, and Yin is born of Yang.” Again, “Unaccompanied Yin cannot be generated, and solitary Yang cannot be formed.”

CM labels these two additional aspects in the interaction between Yin and Yang the relationships of mutual dependence and of mutual support. They are applied extensively, i.e. in physiology, pathology and therapeutics. Consider, for example, the relationship between Qi and blood in the human body. (Note that the term Qi is used in a narrower sense here.) In the body Qi belongs to Yang whereas blood and essence belong to Yin; yet Qi can generate blood and can reside in blood. Qi can generate essence, and essence can generate Qi. From this it can be seen that in the human body the principal manifestation of the mutual dependence and mutual support of Yin and Yang lies in their mutual assistance and augmentation. Though Yin and Yang each has its own province of activities, their actions are neither unrelated nor exclusive; rather, they are cooperative and harmonious. It is as *Plain Questions* states: “Yin resides in the interior and is the reserve for Yang. Yang resides in the exterior and is the manifestation of Yin.” This is the best explanation for

the physiological relationship of interdependence and mutual support between Yin and Yang in the human body.

If the interdependence and mutual support of Yin and Yang are disrupted, both lose their condition for existence and pathological changes will ensue. Suppose, for example, that the relationship between Yang-Qi and Yin-fluid in the body, or between substance and function, is disrupted. In mild cases, there may be disharmony between Yin and Yang, resulting in damage to Yang-Qi or Yin-fluid. In severe cases, there may be “disconnection between Yin and Yang, resulting in the exhaustion of essence and Qi,” and hence the end of vital activity.

### iii Equilibrium and Waning–Waxing of Yin–Yang

The waning and waxing of Yin and Yang clarify how things stand in opposition and how opposites change in sequentially rising and declining. The theory of Yin–Yang postulates that things and phenomena standing in opposition are not in a static state, but are in the process of change. CM uses this perspective to explain seasonal changes in nature as well as changes in the physiology and pathology of the human body.

For example, as the year progresses from spring to summer, coldness gradually decreases as hotness increases daily. This is known as “Yin waning as Yang waxes.” From autumn to winter, hotness gradually decreases as coldness increases daily. This is known as “Yang waning as Yin waxes.”

It is because the seasonal changes follow the regular waxing and waning of Yin and Yang that there result the variations in cold, heat, warmth and coolness in weather. Similarly, in the human body, the rise of various functional activities (Yang) inevitably consumes a measure of nutritive substances (Yin); this is a part of the process of “Yang waxing as Yin wanes.” Conversely, the generation of nutritive substances (Yin) inevitably reduces functional capacity (Yang); this is a part of the process of “Yin waxing as Yang wanes.” In the normal physiological state, the waning and waxing of Yin and Yang are in a state of relative dynamic equilibrium. This is known as: “when Yin is steady and Yang is consolidated then the vital activities are harmonious.”

The dynamic equilibrium of the waning and waxing of Yin and Yang is a normal physiological relationship based on the inter-dependence of Yin and Yang. Under normal conditions, owing to the mutually restraining relationship between Yin and Yang the waning and waxing always remain within limits, so that a dynamic equilibrium is maintained in which as one advances the other retreats, and vice versa. Under abnormal conditions, however, this harmonious relationship of mutual restraint is lost. The waxing or waning of Yin and Yang may then exceed physiological limits, so that the mutually opposing dynamic equilibrium between Yin and Yang becomes disrupted. In such circumstances, there may be excessive deficiency or abundance, resulting in disease. CM applies this theoretical perspective of dynamic equilibrium between the waning and waxing of Yin and Yang to explain the seasonal changes of nature and the physiological functions and pathological changes in the human body.

It should be pointed out that under the influence of ancient philosophical thought CM places more emphasis on the harmony between Yin and Yang than on the conflict between them. From this the systemic characteristics of its methodology of diagnosis and treatment are derived. For, it is only when the Yin and Yang in the human body are in harmony and balance that all the bodily functions can be effectively preserved.

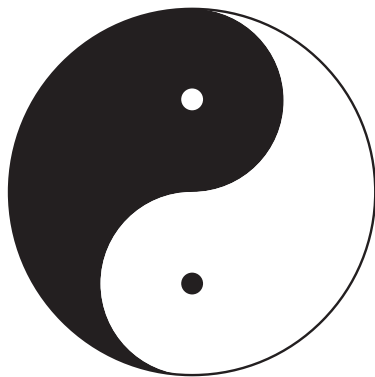
#### iv Mutual Transformation of Yin and Yang

The theory of Yin–Yang asserts that under certain conditions either member of a pair or opposites can transform into the other. That is to say, Yin can transform into Yang and Yang into Yin. Mutual transformation of Yin and Yang is another aspect of their actions.

Every thing or phenomenon encompasses both Yin and Yang. Which of them is the principal or leading factor is what determines the Yin or Yang nature of the thing or phenomenon. But this relative primacy of Yin or Yang is not static. When one or the other exceeds certain limits their relative positions may become reversed; and when that happens, the nature of the thing or phenomenon will change concomitantly. This is the meaning of the old adage, “When extreme, reversal is inevitable.” The “extreme” here refers to the degree or state of Yin and Yang, and also the condition for transformation. Without this condition, transformation cannot take place. If the waning and waxing of Yin and Yang is regarded as a process of quantitative change, then their mutual transformation may be regarded as a process of qualitative change. Practically, however, the waxing and waning and the mutual transformation of Yin and Yang may be regarded as two inseparable stages of development. Waxing and waning are the necessary precondition for transformation, and transformation is the necessary result of waxing and waning.

*Plain Questions* points out: “when extreme, Cold gives rise to Heat; and when extreme, Heat gives rise to Cold.” This statement points to the transformation of Yin and Yang as well as the condition for such transformation. Thus, clinically a disease of Heat may convert into a disease of Cold, a disease of excess may convert into a disease of deficiency, a disease of Cold may convert into a disease of Heat, and a disease of deficiency may convert into a disease of excess. These kinds of conversion provide both examples and clarification of the mutual transformation of Yin and Yang.

For example, in a patient with pneumonia, there are high fever, flushing of the complexion, agitation, and a rapid and forceful pulse. These manifestations pertain to diseases of Yang, of Heat, and of excess, and should be treated with cooling herbs. But if the disease is left untreated, or is treated incorrectly, it may worsen and become critical. At that point there may be sweating, coldness in the limbs, pallor, hypothermia, hypotension, shallow and rapid respiration, and a pulse that is indistinct or about to collapse. These manifestations pertain to diseases of Yin, of Cold, and of deficiency. Such an overall course is an example of “when extreme, Heat gives rise to Cold.”



**Fig. 1.2** Diagram for Taiji

The basic principle of the theory of Yin–Yang just described is illustrated in the Taiji diagram of [Fig. 1.2](#).

In this illustration, black indicates Yin, and white Yang. Both exist within an entity indicated by the big circle. A curved line is used to divide the circle in order to show the multiple relationships between Yin and Yang – their opposition, their inter-dependence, their mutual support and transformation, as well as their waxing and waning. In the black portion there is white spot, and in the white portion there is a black spot. These indicate that within Yin there is Yang, and within Yang there is Yin. They further emphasize the inter-dependence and mutual transformation of Yin and Yang. Thus, the diagram illustrates that no phenomenon is isolated; rather, all phenomena are inter-connected in development and change. The two aspects of the relationship between Yin and Yang – opposition and unity – work together to maintain a dynamic equilibrium between them, thus bringing stability and orderly normality to all things.

### ***3 Application of Yin–Yang Theory in CM***

The theory of Yin–Yang helped the ancient physicians to establish the CM theoretical system, and penetrated all its parts. It is especially important for understanding the body's structure, physiology, pathology, and for guiding clinical diagnosis and treatment, see also [Fig. 1.3](#).

#### **i The Structure of the Body**

In CM the human body is an organic whole based on the union of opposites. Every tissue and organ can be assigned to either Yin or Yang, and at the same they are inter-connected and function intimately together. The assignment to Yin and Yang greatly facilitates understanding of the highly complex physiology and pathology ([Table 1.4](#)).

Application of Yin-Yang Theory  
in Physiology and Pathology

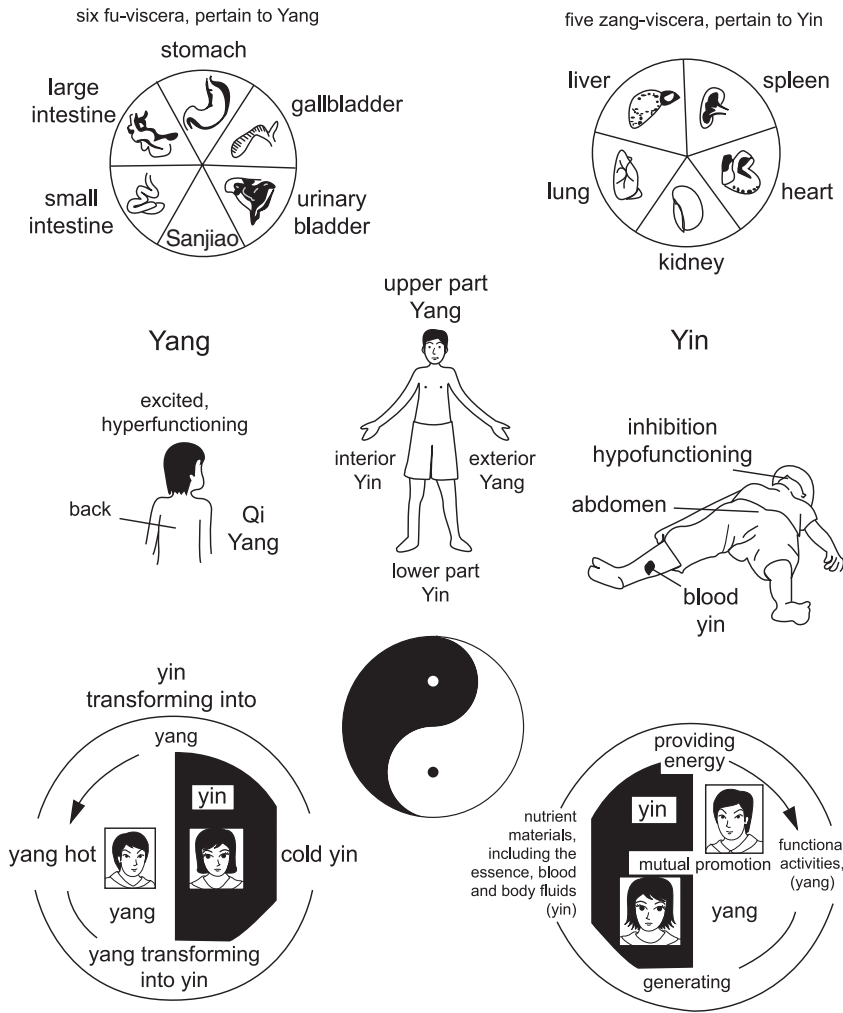


Fig. 1.3 Yin–Yang in physiology and pathology

Table 1.4 Yin–Yang classification of structure of body

Attribute	Location in Body	Tissue and Organ
Yang	Exterior, head, upper part, back, lateral side of limbs	Skin, muscle, upper orifices, <i>fu</i> viscera, Yang meridians
Yin	Interior, feet, lower part, medial side of limbs	Tendon, bone, lower orifices, <i>zang</i> viscera, Yin meridians, essence, blood, body fluid

## ii Physiological Functions of Body

The theory of Yin–Yang postulates that the normal vital activities of the human body depend upon the harmonious cooperation of Yin and Yang through their opposition and unity. The various functional activities of the body belong to Yang, and all material bases for the vital functions, including essence, blood and body fluids, belong to Yin. All the vital functions depend upon the nutritive substances. Without adequate nutritive substances full vital functions cannot be assured. At the same time, the vital functions are the driving force in the generation of the nutritive substances. Put another way, without the normal functions of the *zang* and *fu* organs, food and drink cannot be transformed into nutritive substances. It is because of the harmonious cooperation between the functions and their supporting substances and of the dynamic equilibrium between Yin and Yang in the body that healthy vital activities are maintained.

In regard to the body's resistance to disease, such resistance can be effective only if Yin and Yang within the body are in dynamic balance and if the body's Yin–Yang are harmonious with the Yin–Yang in the environment outside the body. Yang in the exterior of the body is the agent that repels exogenous disease-causing evils and that protects the body's internal structure and organs. Yin in the interior of the body is the material basis for Yang and its continual supply of reserves and capability.

This is but one example of the use of theory of Yin–Yang to explain the interaction between man and nature to preserve balance in functions.

## iii Pathological Changes of Body

Disease-causing evil Qi can be classified into Yang evil and Yin evil. For example, disease-causing Wind, Heat and Fire are Yang evils, whereas disease-causing Cold and Dampness are Yin evils.

CM holds that disease may occur when something causes disturbance in the balance of Yin–Yang, resulting in excess or deficiency of one or the other. The occurrence and progression of disease relate to both genuine Qi and evil Qi. The interaction and struggle between these two can be encompassed and explained by the theory of Yin–Yang.

Genuine Qi comprises both Yin essence and Yang Qi. Hence, a disturbance in the balance of Yin and Yang mostly manifests as one-sided excess or deficiency of one or the other. For example, when a Yang evil causes disease it can induce an excess of Yang and injure Yin; consequently, the symptoms of Heat disease appear. When a Yin evil causes disease it can induce an excess of Yin and injure Yang; consequently, the symptoms of Cold disease appear. When Yang Qi is deficient it cannot restrain Yin; then there may appear symptoms of deficiency-Cold disease due to Yang deficiency and Yin excess. Conversely, when body fluids are insufficient Yin cannot restrain Yang; then there may appear symptoms of deficiency-Heat disease due to Yin deficiency and Yang excess.

Thus, though diseases are many, varied and complex and can change in many ways, from the viewpoint of Yin–Yang they nevertheless all fall within four types of pathological processes: Yang excess, Yin excess, Yang deficiency, and Yin deficiency. In general, disturbance in Yin–Yang is the overarching process in human illnesses.

#### iv Clinical Diagnostics

The fundamental pathology of the onset, progression and changes of disease lies in the disturbance in the balance of Yin–Yang. For this reason, in clinical practice no matter how complex or how variable the many symptoms may be they can all be analyzed and differentiated according to the principles governing changes in Yin–Yang. Hence, *Plain Questions* states: “when observing complexion and palpating the pulse, those who are skilled at diagnosis first ascertain Yin and Yang.” This indicates that in the four diagnostic methods of CM – observation, listening and smelling, questioning, and palpation – the first task is to ascertain Yin and Yang. Take observation, for example. In general, a complexion that is red, lustrous and well hydrated is Yang, whereas one that is pale, sallow and lusterless is Yin. Again, in listening and smelling, coarse respiration and a loud voice are Yang, whereas weak respiration and a soft voice are Yin.

In CM, diagnostics uses Yin–Yang as the guiding principle. The cause, location and character of disease can be ascertained by Yin–Yang. For example, illnesses in the exterior, illnesses of Heat and illnesses of excess are Yang illnesses. Illnesses in the interior, illnesses of Cold and illnesses of deficiency are Yin illnesses. In this way, though illnesses may change in a thousand ways, they are nonetheless within the sphere of Yin–Yang. Application of this technique can reduce complex clinical manifestations to simplicity and make possible accurate diagnosis.

#### v Clinical Treatment and Herbal Therapeutics

In CM the underlying cause of disease is disturbance in the balance of Yin–Yang. Hence the fundamental principle of treatment is to regulate Yin–Yang by augmenting the deficient and reducing the excessive, thereby restoring proper balance and harmony between Yin and Yang. The clinical theory of Yin–Yang therefore encompasses the treatment principles and the nature and efficacy of CM treatments. In the spirit of restoring proper Yin–Yang balance such rules of treatment as the following have been devised: “if cold warm it”; “if hot cool it”; “if deficient augment it”; and “if excessive purge it.” Also: “in Yang diseases treat Yin” and “in Yin diseases treat Yang.” All these rules share the goal of restoring balance to Yin–Yang.

The primary determinants of the efficacy of a Chinese medicinal herb are its nature and its flavor. In CM herbs exhibit four different natures: cold, cool, warm and hot. Herbs of cool or cold nature are used to treat Heat diseases; they belong to Yin. Herbs of warm or hot nature are used to treat Cold diseases; they belong

to Yang. In CM herbs also exhibit five different flavors: sour, bitter, salty, acrid and sweet. Herbs of sour, bitter or salty flavor belong to Yin, and those of acrid or sweet flavor belong to Yang. Herbs with bland flavor also belong to Yang. In regard to other properties, herbs that are light or have the ability to float, ascend or disperse belong to Yin. Those that are heavy or have the ability to sink, descend or astringe belong to Yang. Hence, in prescribing herbs the physician must pay attention to the relationship between Yin–Yang of the disease and Yin–Yang of the herbs in order to exploit each herb’s efficacy and to achieve the therapeutic goal.

### III Theory of Five Elements

#### 1 *Basic Concept of Five Elements*

The theory of the Five Elements concerns the movement and changes of the five basic matters of Wood, Fire, Earth, Metal, and Water. The theory was born when the ancients used the properties and characteristics of these five substances to represent those of all material things in the universe, and to use the interrelationship between them to interpret and describe the evolution and complex interrelationship of all material things.

When this theory was first conceived, the original term was “the five substances.” That term referred to the five substances that were the essentials in the daily life of the people. As the *Shangshu* states: “the people are dependent on water and fire for food and drink, on metal and wood for building and shelter, and on earth to grow life. All five are for the people’s use.” By the era of the Warring States (475–221 BC), the conception of these five substances had undergone significant philosophical development. The Five Elements no longer meant the five basic substances, but had become the fundamental archetypes of matter that constitute the material essence of all things in the universe. The interrelationship between these five archetypal matters then became the explanation for the movement, the transformation and the interrelationship between all material things.

#### 2 *Basic Contents of Theory of Five Elements*

The theory of the Five Elements uses the principle of analogy to classify all things and phenomena in the universe into five categories in terms of the characteristics of Wood, Fire, Earth, Metal and Water. It then proceeds to explore the interconnections between them and their changes. The basic contents of this theory are briefly introduced here.

## i Characteristics of the Five Elements

From their observations of the properties of wood, fire, earth, metal and water over a very long time of daily living, the ancients gradually formulated a more abstract conception of the characteristics of the Five Elements. This broader conception has a wide range of application.

Characteristics of Wood: “bending and straightening.” These derive from the ability of trees to grow and to branch, which is then abstracted as the ability to bend, to extend, to break free, to rise and to flourish. These are all characteristics of Wood.

Characteristics of Fire: “blazing upwards.” This derives from the upward mobility of fire, which is then abstracted as the possession of heat, and the ability to rise and to give out light. These are all characteristics of Fire.

Characteristics of Earth: “sowing and reaping.” These derive from the planting and harvesting on a farm, which are then abstracted as the ability to receive, to bear, and to nourish. These are all characteristics of Earth.

Characteristics of Metal: “malleability.” This derives from the ability of metal to conform to external forces despite its strength, which is then extended and abstracted as the ability to astringe and to coalesce and its sonority. These are all characteristics of Metal.

Characteristics of Water: “moistening downward.” This derives from the nature of water to moisten and to flow downward, which is then extended and abstracted as the ability to moisten, to move downward, to cool, and to conceal. These are all characteristics of Water.

## ii Classification of Things by the Five Elements

By employing the method of “classifying by analogy” the ancients established extensive connection between the organization of the viscera, the physiology, the pathology, and the like, of the human body, as well as the intimate relationship between human life and nature. On the basis of the properties and appearance of the things and phenomena the theory of the Five Elements classifies them into five categories, each category belonging to one of the Elements ([Table 1.5](#) and [Fig. 1.4](#)).

Three important points about this table should be noted.

1. The characteristics of the Five Elements explain the physiological functions of the five *zang* viscera. For example, the nature of Wood is to grow and flourish. The nature of the liver is to flourish and the liver governs mobilization. Again, the nature of Water is to moisten and flow downward. The nature of the kidney is to store essence and the kidney governs the flow of body fluids. It is similar for the other *zang* organs.
2. The *zang* viscera are the principal organs. Externally, they resonate with the five seasons, the five orientations, the five weather agents, the five colors, the five flavors, etc. Internally, they link with the *fu* viscera, the five sense organs, the

**Table 1.5** Partial classification by the five elements

The Five Elements	The Natural World						
	The Five Grains	The Five Flavors	The Five Colors	The Five Transformations	The Five Weather Agents	The Five Orientations	The Five Seasons
Wood	Wheat	Sour	Green	Germination	Wind	East	Spring
Fire	Foxtail Millet	Bitter	Red	Growth	Heat	South	Summer
Earth	Sorghum	Sweet	Yellow	Transformation	Dampness	Middle	Late summer
Metal	Rice	Acrid	White	Reaping	Dryness	West	Autumn
Water	Soybean	Salty	Black	Storing	Cold	North	Winter
The Human Body							
The Five Elements	The Five <i>Zang</i> Organs	The Five <i>Fu</i> Organs	The Five Sense Organs	Five Body Tissues	The Five Passions	The Five Fluids	The Five Pulses
Wood	Liver	Gallbladder	Eyes	Tendons	Rage	Tears	Taut
Fire	Heart	Small intestine	Tongue	Vessels	Joy	Sweat	Surging
Earth	Spleen	Stomach	Lips	Muscles	Brooding	Saliva	Moderate
Metal	Lung	Large intestine	Nose	Skin and hair	Grief	Nasal discharge	Deep and thin
Water	Kidney	Urinary bladder	Ears	Bones	Fear	Spittle	Deep

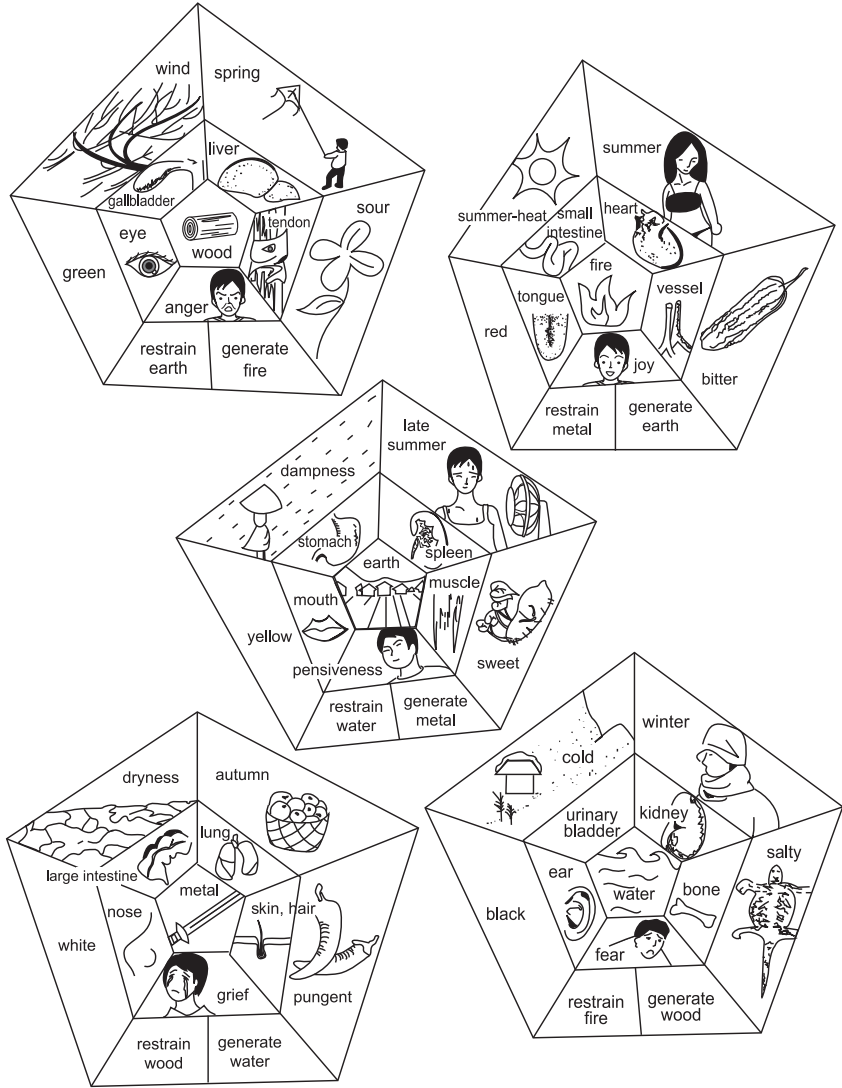


Fig. 1.4 The Five Elements

- five body tissues, the five passions, the five fluids, etc., in five functional systems. (Note the designation of late summer as an additional season.)
3. These five functional systems demonstrate that between the internal environment of the body and its external surroundings there is also a relationship of opposition and unity. Take geographic orientation, for example, the sun rises in the east, thus symbolizing the growth and luxuriance of trees; hence the east belongs to Wood. The climate in the south is blazing hot. It accords with the blazing nature of

Fire; hence the south belongs to Fire. The rest can be inferred. In the human body, the liver belongs to Wood. According to CM, the liver governs the tendons and supports the eyes; hence the tendons and the eyes belong to Wood. The heart belongs to the Fire Element. The heart governs the pulse and supports the tongue; hence the pulse, the tongue, etc., belong to Fire. All those with similar properties can all be assigned to the same category.

### iii Relationships of Generation and of Restraint among Five Elements

The Five Elements are related to one another in two basic systemic and regulatory ways: generation and restraint. Generation and restraint are together a fundamental principle used by the theory of the Five Elements to encompass and explain the relationships between things, and their development and changes.

**Generation:** The concept of generation contains the ideas of production, stimulation and augmentation. The cyclic sequence of generation is as follows: Wood generates Fire, Fire generates Earth, Earth generates Metal, Metal generates Water, and Water generates Wood. There are two aspects to the relationship of generation for each Element, those of “being generated” and of “generating.” The generating Element is the “mother” of the generated Element, and the generated Element is the “child” of the generating Element. Hence, the generation relationship is also known as the “mother–child” relationship. Take Fire, for example. Fire generates Earth; thus Fire is the mother of Earth, and Earth is the child of Fire. The other four Elements follow this example.

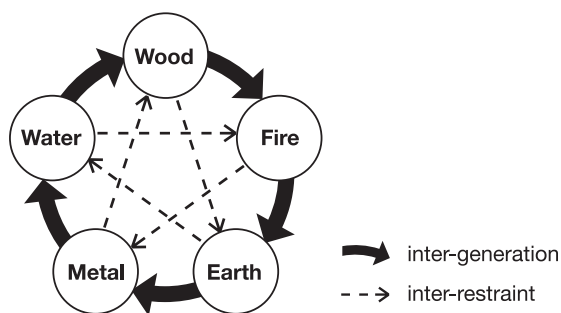
**Restraint:** The concept of restraint contains the ideas of restriction, check and inhibition. The cyclic sequence of restraint is as follows: Wood restrains Earth, Earth restrains Water, Water restrains Fire, Fire restrains Metal, and Metal restrains Wood. As for generation, there are two aspects to the relationship of restraint for each Element, those of “being restrained” and of “restraining.” The restraining Element is the “suppressor” and the restrained Element is the “suppressed.” Hence, the relationship of restraint is also known as the “suppressor–suppressed” relationship. Again, take Fire for example. Fire is the suppressor of Metal, and Metal is the suppressed of Fire.

In the theory of the Five Elements, each Element has a direct relationship with all the other Elements. For example, Earth is the mother of Metal and the child of Fire, and at the same time it is the suppressor of Water and the suppressed of Wood.

**Figure 1.5** graphically presents the relationships of generation and of restraint among the Five Elements.

It should be noted that in CM the two relationships of generation and of restraint are inseparable. Without generation things cannot be born and cannot develop. Without restraint things can grow without limit and cause harm. It is necessary to have both generation and restraint in order to maintain harmonious relationships between things, and to assure their normal development and change. The course of generation and restraint is also the course of the waxing and waning of all things, in which the old balance and coordination break down and a new balance and coordination

**Fig. 1.5** Relationships of the Five Elements



are reached through the self-adjustment of their generation and restraint relationships. The course of this cycle of balance–imbalance–balance gives impetus to the ceaseless development and change of things. Hence, the essence of the theory of the Five Elements is the maintenance of the normal regularity of generation and restraint among the Elements.

#### iv Over-Restraint and Counter-Restraint Among Five Elements

Over-restraint and counter-restraint are abnormal relationships among the Five Elements. They may occur under the influence of certain factors.

**Over-restraint:** This refers to excessive restraint. Under normal circumstances the restraint relationship has definite limits. If restraint exceeds these limits then abnormal reactions ensue; this is known as over-restraint. Two circumstances can give rise to over-restraint: excessive forcefulness of the restraining Element, and marked weakness of the restrained Element. For example, normally Wood restrains Earth, but if Wood is especially strong or if Earth is especially weak then Wood can over-restrain Earth. Over-restraint is the use of strength to oppress the weak.

The order of over-restraint is the same as that of restraint. It should be noted, however, that restraint and over-restraint are quite different. Restraint is a relationship under normal conditions, whereas over-restraint is an abnormal relationship of excess that obtains when the normal relationship has been disrupted. In the human body, the former is physiology and the latter pathology.

**Counter-restraint:** This refers to the reversal of restraint, in which the suppressed turns about and suppresses its suppressor. This too can arise in two circumstances. In one, the restrained Element is too strong. For example, normally Metal restrains Wood. If Wood is too strong Metal is unable to restrain it, and Wood can reverse the process and restrain Metal instead. In the other, the restraining Element is too weak. For example, normally Wood restrains Earth. If Wood is too weak Earth can reverse the process and restrain Wood instead. Hence, counter-restraint is the exploitation of weakness in the Element's normal suppressor in order to suppress it. The order of counter-restraint is the reverse of restraint.

Over-restraint and counter-restraint are abnormal relationships among the Five Elements. They are connected, insofar as whenever over-restraint occurs there is also counter-restraint; similarly, whenever counter-restraint occurs there is also over-restraint.

The usefulness of these concepts can be illustrated with a clinical example. Consider the common clinical condition of bronchiectasis of the lung. It often occurs when stagnant liver-Qi turns into Fire, scorching the lung and leading to hemoptysis. This is known as “Wood-Fire impairing Metal” (or “excessive Wood counter-restraining Metal”). If accumulation of liver-Qi impairs the functions of the spleen and stomach in digestion and absorption, it is known as “accumulated Wood over-restraining Earth.” Another example is hypertension due to Dampness-Heat. Dampness-Heat encumbering the spleen often creates dysfunction of liver-Qi and hyperactivity of liver-Yang. This is known as “obstructed Earth counter-restraining Wood.”

### ***3 Application of Theory of Five Elements in CM***

The theory of the Five Elements pervades CM. It not only fostered the formation of the CM theoretical system, but also has an important role in explaining the physiological functions of the body and pathological manifestations, as well as in guiding clinical diagnosis and treatment.

#### **i Organization of Human Body and Natural Environment into Five Systems**

CM employs the method of analogy of the Five Elements. It regards the five *zang* viscera as the core of the human body and the five seasons of nature as a pivotal point, and uses them to classify physiological and pathological processes as well as the related phenomena in nature and to organize them into five systems. In this way, it formulates the theoretical basis for the holistic outlook and for the functions of the viscera. For the key components see [Table 1.5](#).

Take the Wood Element, for example. In the human body, the theory of the Five Elements first links the *zang* organ liver to Wood, then groups the gallbladder, the eyes, the tendons, tears, rage, and stringy pulses in the same category. The linking and assignment are applied four more times, so that the entire human body is organized into five functional systems. In nature, the Wood Element is first linked with the spring season; then the east orientation, wind, growth, green color, and sour taste, etc. are grouped in the same category. The same process is applied to the other four Elements.

In this way, in accordance with the special properties of the Five Elements, the structures and functions of the human body and all relevant matters in nature are classified into five great systems. All things and phenomena assigned in the same classification are closely connected.

## ii Physiological Functions and Interrelationships among *Zang* Viscera

In CM the special characteristics of the Five Elements are used to explain the physiological functions of the five *zang* viscera. For example, Wood can bend and can straighten, and it is soft and smooth. The liver belongs to Wood. Thus, the liver likes to function smoothly and dislikes being blocked, and it has the capacity to guide and to disperse. The nature of Fire is hot and it blazes upward. The heart belongs to Fire, so the Yang-Qi of the heart has the capacity to warm and the Fire of the heart to blaze upward. The nature of Earth is thick and solid, and Earth has the capacity to generate all things. The spleen belongs to Earth; hence the spleen has the function of digesting food and transporting the nutrients to nourish the entire body. The spleen is also the organ that generates Qi and blood. The nature of Metal is to contract and to astringe. The lung belongs to Metal; hence the lung has the capability of depuration and dispersion. The nature of Water is to moisten. The kidney belongs to Water; hence the kidney governs the replacement and excretion of fluids, and also the capacity to store the essence of life.

In CM the five *zang* organs are the center of the body's physiological activities. Each organ has its own vital functions, but they are interrelated and coordinated so as together to fulfill the entire range of physiological activities. That they correspond to the Five Elements illustrates not only some of their functional characteristics, but also their interrelationships of generation and restraint.

For example, the kidney stores the essence of life, and the liver stores blood. The kidney-essence can generate liver-blood; this is the process of "Water generating Wood." The liver stores blood and regulates its volume, and it assists the heart in the governance of the pulses and the vessels and their normal activities; this is "Wood generating Fire." The heart governs the vessels and mental activities, and the spleen governs transportation and transformation and commands blood. Only when the heart performs its functions can blood nourish the spleen, and enable it to perform its function normally. This is the process of "Fire generating Earth." The spleen governs transportation and transformation of water and grain, and the lung governs dispersion and depuration. The spleen can transport the essence of food to reinforce lung-Qi, thus maintaining the lung's function of guiding Qi and ensuring that the lung can carry out dispersion and depuration normally. This is the process of "Earth generating Metal." The lung governs the movement of Qi and has the function of depuration, and the kidney stores essence and receives Qi. Lung-Qi assists the kidney in consolidating kidney-essence and receiving Qi. This is the process of "Metal generating Water."

The restraint relationship can be similarly illustrated. The depuration action of lung-Qi promotes the free flow of Qi and suppresses the excessive rise of liver-Qi; this is the process of "Metal restraining Wood." The smooth flow of liver-Qi can help to disperse any spleen-Qi that is stagnant; this is the process of "Wood restraining Earth." The transportation and transformation of spleen-Qi regulate the function of the kidney in governing the body fluids, preventing the accumulation of Dampness; this is the process of "Earth restraining Water." The moistness of kidney-Water can reach upward to the heart to check the blazing-up of heart-Fire; this is the process

of “Water restraining Fire.” The warming and propelling functions of heart-Yang can limit the cooling and astringent effects of the lung; this is the process of “Fire restraining Metal.”

Owing to the functional links between each *zang* organ and the other four *zang* organs through the generation and restraint relationships, balanced and harmonious relationships can be maintained, and normal life activities of the human body achieved.

### iii Pathology and Mutual Influence of *Zang* Viscera

CM uses the theory of the Five Elements to organize the various organs and tissues of the body and the relevant phenomena in nature into five systems. Each system groups together one of the five *zang* organs and one of the five seasons of the year, along with many other things. Because of the connections among members of each of these five systems, CM holds that each *zang* organ can be affected by the evil Qi that is produced by or during its corresponding season. For example, the liver is particularly susceptible to the evil Qi in spring. Since the main evil Qi in spring is that of Wind, the liver suffers mostly from diseases of Wind. Similarly, the heart is often affected in summer and suffers from diseases of Heat. The spleen is often affected in late summer and suffers from diseases of Dampness. The lung is often affected in autumn and suffers from diseases of Dryness. The kidney is often affected in winter and suffers from illnesses of Cold. In addition, excessiveness of a weather factor can impair not only the respective corresponding *zang* organ but also its restrained *zang* organ. For example, excessive dampness in nature can lead not only to a disorder of the spleen, but also easily to impairment and disorder of the kidney.

The mutual pathological influence between the *zang* and *fu* organs is termed transmission. Illnesses of the five *zang* organs resulting from the transmission of pathological influence is mainly manifested through the “mother–child” relationship of generation and the over-restraint and counter-restraint relationships of restraint.

Transmission related to the mother–child relationship is of two patterns: “disorder in the mother affecting the child” and “disorder in the child affecting the mother.” The “disorder in the mother affecting the child” pattern means that disease is transmitted from the mother *zang* organ to its child *zang* organ. For example, this pattern is seen when a kidney disorder affects the liver; similarly when a spleen disorder affects the lung. The “disorder in the child affecting the mother” pattern means that disease is transmitted from the child *zang* organ to its mother *zang* organ. For example, this pattern is seen when a chronic disorder of the lung leads to deficiency of the spleen-Qi (“the child stealing the mother-Qi”); similarly when a heart disorder affects the liver or a kidney disorder affects the lung.

Transmission related to the over-restraint and counter-restraint relationships is also of two patterns. For example, stagnation of liver-Qi creating failure of the spleen to regulate transportation and transformation fits the pattern of “the liver over-restraining the spleen.” Upward blazing of liver-Fire causing the lung to fail in its functions of dispersion and depuration fits the pattern of “the liver counter-restraining the lung.”

It should be pointed out that transmission of either the mother–child or the over-restraint and counter-restraint relationships is not inevitable in clinical practice. In general, transmission occurs when the Qi of a *zang* organ is deficient, but does not occur or is unlikely when the Qi of the *zang* organ is not deficient. It is important to be flexible, not rigid, in assessing such possibilities.

#### iv Guiding Diagnosis

CM postulates that disorders of the internal organs can also affect the organs in the exterior of the body, and that this effect has its abnormal manifestations that can be linked in accordance with the theory of the Five Elements. For example, red and painful eyes, irritability and emotional liability, and a taut pulse are together recognizable as symptoms of liver illness. Loss of appetite, distention and pain of the abdomen, and diarrhea are together recognizable as symptoms of “hyperactive liver over-restraining the spleen.”

Knowledge of the principles of generation, restraint, over-restraint and counter-restraint can be used to control and prevent transmission of disease. For example, if the liver is diseased, the physician should take care to strengthen the spleen and the stomach in order to prevent transmission of disease to these organs. When the spleen and the stomach are vigorous, transmission of illness to them becomes difficult and the patient will recover more readily.

#### v Guiding Treatment

The formulation of the principles and methods of treatment is mainly guided by the laws of generation and restraint among the Five Elements. Many illnesses are caused either by strong evil Qi or by deficient genuine Qi of a *zang* organ, which leads to imbalance and disharmony between the *zang* and the *fu* organs. For this reason, “augmenting the deficient” and “purging the excessive” have become the basic principles of treatment in CM. Such a direct approach is very commonly used in clinical practice. For example, the method “purge the south (heart-Fire) and augment the north (kidney-Water)” is applied in illnesses of disharmony between the heart and kidney, with blazing of heart-Fire and deficiency of kidney-Water.

When applying these principles the physician must often regularize the relationship among the Five Elements. For example, the method of “invigorating the spleen to benefit the lung” (an example of “strengthening Earth to generate Metal”) applies the treatment principle “when (an organ is) deficient augment its mother.” In an illness of hyperactivity of the liver due to blazing liver-Fire use the method of “clear the heart by purging the Fire.” This is an application of the treatment principle “when (an organ is) excessive purge its child.” The method “cultivate Earth to generate Metal” is applied in diseases of deficiency of both the spleen and the lung. The method “enrich Water to nourish Wood” is applied in diseases of hyperactivity of liver-Yang due to deficiency of both liver-Yin and kidney-Yin. In addition, in

acupuncture and moxibustion therapy, along each of the three Yin and the three Yang meridians of the hands and feet there are five acupoints – Jing (well), Ying (spring), Shu (stream), Jing (river), He (sea) – that are located in the extremities of the limbs (see Volume 2, Part I, Chapter 2, Section 3, Subsection i). These five acupoints belong respectively to Wood, Fire, Earth, Metal and Water. In clinical practice, different acupoints are selected in different disease conditions in accordance with the principles of generation and restraint among the Five Elements.

The theory of Yin–Yang is an analytic tool that uses the interaction of Yin and Yang to understand the development and changes of things and the human body's vital functions. The theory of the Five Elements uses the method of analogy to explain the nature, characteristics, systemic structure and complex relationships of things. These two theories interpenetrate and supplement each other, and are intimately related. In CM they both provide simple, practical and flexible thinking methods and theoretical tools for exploring and formulating the laws of the vital activities of the human body and for the diagnosis and treatment of diseases. Even today, they still guide clinical practice to a large extent. At the same time, owing to limitations inherent in historical conditions, they are mechanical to some extent. Hence, the physician must take care to apply them intelligently and not use them blindly.

## **Guidance for Study**

### **I Aim of Study**

This chapter covers the formation and development of the theoretical system of CM and its philosophical basis. To acquire an understanding of CM it is important to know its history at least briefly, and to master its philosophical basis as preparation for learning the contents of subsequent chapters.

## **II Objectives of Study**

After completing this chapter the learners will

1. Understand broadly the formation and development of the theoretical system of CM
2. Understand the unity of Qi and its properties
3. Master the basic concepts of the theory of Yin–Yang and its main contents
4. Master the basic concepts of the theory of the Five Elements, and its main contents
5. Become familiar with the application of the theories of Yin–Yang and of Five Elements in CM

### III Exercises for Review

1. What are the landmarks for the initial formation of CM theoretical system? And why?
2. What does the unity of Qi mean? What are its features?
3. How does one ascertain the Yin and Yang of things?
4. Describe the relationship between Yin and Yang. How do Yin and Yang affect the movement and changes of things?
5. Describe the waxing and waning and transformation of Yin and Yang. Give examples.
6. Demonstrate the main points of application of the theory of Yin–Yang in clinical practice. Give examples.
7. How was the theory of the Five Elements formed?
8. What is the core content of the theory of the Five Elements? In which respects is its theoretical significance manifest?
9. In CM what is the basis of classification by the Five Elements? Give examples to illustrate it.
10. Give examples to illustrate the clinical application of the theory of Five Elements in CM.

## Chapter 2

# Chinese Medicine Methodology

Methodology in CM developed in the course of explorations in human physiology, pathology, diagnostics and preventive medicine, as well as the relationships between the human body and the surrounding natural environment. Knowledge of this methodology is essential in the study and mastery of CM theory.

### Section 1 View of Life in CM

#### I Essence is the Basis of Life

CM recognizes that life is a natural phenomenon and is the inevitable outcome of the evolutionary movement of substances in the universe. Medicine can be defined as the scientific study of normal and abnormal life activities, the prevention and cure of disease, and health maintenance. CM therefore opposes any superstition concerning life.

*Plain Questions* states: “The heaven provides to humans the five Qi while the earth provides to them the five Flavors.” Also: “Humans are born of the joint Qi of heaven and earth, and are shaped by the laws of the four seasons.” In other words, it is only when Yin-Qi and Yang-Qi in the universe cooperate and the Yang-Qi of heaven and Yin-essence of earth merge that life can appear. Thus, *Spirit Pivot*, a part of *Huangdi’s Internal Classic*, states: “When humans are first born, essence is formed first. Vitality is the life-force created by the combination of Yin essence and Yang essence.”

CM regards essence as the basis of life. There is life only after the organic union of the essence and the Qi of Yin and Yang. Hence, essence has the following three layers of meaning. First, a new life is formed when the reproductive essences of male and female combine following sexual union. Second, only then is there a body, including the internal organs and the many systems and tissues, each of which has an essence. These specific essences are all derived from the original essence, and continue to receive sustenance from post-natal nourishment. Third, a person’s life span, from birth to senescence, his health or disease, the fullness of his essence and Qi, and his normality or abnormality are all directly connected.

## II Union of Body and Vitality

“Body” refers to the configuration and constitution of the human body. It comprises the *zang* and *fu* viscera, the meridians and their collateral branches, the essence, *Qi*, blood, the body fluids, the five sense organs, the nine orifices, the four limbs as well as the tendons and muscles, the skin and the bones. In CM “vitality” is used in two senses, a broader and a narrower. In the broader sense, vitality encompasses all the observable manifestations of the life processes of the human body. These include the various physiological or pathological signs and symptoms. In the narrower sense, vitality encompasses the human spirit, consciousness and thought, and a whole series of psychological activities such as the passions. The concept of the union of the body and vitality means that the physical body and the mind are unified. This is an important concept in the basic theories of CM as well as the principles of health preservation.

According to CM theory, the body and vitality are interdependent. They influence each other, and cannot be separated. The body is the material basis of vitality, while vitality is the functional manifestation of the body. A strong body indicates vigorous vitality, whereas a frail body indicates weak vitality. From another perspective, vitality dominates the body. *Plain Questions* states: “With (vigorous) vitality the patient will survive. Without (vigorous) vitality the patient will die.” Again: “When vitality dissipates the body dies.” These statements are clear that the body and vitality are separate yet have an interdependent and mutually affecting relationship. The body is the lodging of vitality, and vitality is the functional manifestation of the body. Their union is the fundamental assurance of life.

Proper understanding of this separate yet interdependent relationship of body and vitality is of great importance in clinical diagnostics, treatment and prevention of diseases.

## III Vital Qi Connecting with Universe

*Huangdi's Internal Classic* contains the celebrated thesis on the relationship between man and nature: “Vital *Qi* is connected with nature.” It means that the vital activities of the human body are closely linked to activities in the universe. Firstly, the human body relies on the unceasing exchanges of both substance and energy with the natural environment to sustain life functions – for example, the digestion and absorption of foods, excretion and breathing. Secondly, the human body is capable of continual adaptation to the natural environment. When the days are hot, *Qi* and blood move toward the body surface, as manifested by profuse sweating and decreased urine, in order to regulate the body temperature. When the days are cold, *Qi* and blood move toward the interior, as manifested by scanty sweating and increased urine, in order to keep the body warm. Thirdly, the human body is not completely passive when adapting to changes in the natural environment. Indeed, once familiar with the regularities of the environment, the human body actively

adjusts its activities as appropriate to the changes in the environment. This avoids the body being injured by harmful influences.

In CM appropriate adaptation to the changes in the seasons and in Yin–Yang is the basic process for assuring health and for curing illnesses. CM attaches great importance to how the natural environment affects the human body. When observing and studying the life-maintaining activities of the body it is very important to attend to the effects of the external environment so that diagnosis and treatment can be accurate and the body's health can be maintained.

## **Section 2 Concept of Illness in CM**

### **I Illness Can Be Studied**

There have existed many views regarding the concept, nature and causes of illness in both modern and ancient times, in China and elsewhere. These different views influenced people of different cultures to adopt different approaches toward illness. In ancient China, before CM was established, ghosts and gods were believed to be responsible for illness. Such beliefs led to the adoption of a passive and fatalistic attitude toward illness. When not well patients usually turned to the sorcerer or sorceress and devout prayers for help.

CM counters such superstitious beliefs and argues that illness is a natural, but avoidable, phenomenon. The reason is that as the year has the various weather changes of the seasons so can the human body be in states of health or illness. In other words, a person can take precautions to avoid disease and to apply effective treatment once disease has developed. Already during the Warring States era, the renowned physician Bian Que severely criticized the harmful customs of belief in sorcery and rejection of medicine. He considered such practices a major cause for treatment failures. According to CM theory the manifestations of illness can help the physician understand its pathological changes and course, and from this understanding he can devise principles and methods for treatment. CM also rejects the notion of incurability and considers that if an illness is not cured it is because the physician's knowledge of the illness is not correct, not clear or not adequate, or because an effective therapy has not yet been found.

## **II Functional Imbalance**

The vital activities of the human body are the interactive sum of the activities of the many components of the body system. When observing or determining whether these activities are normal or abnormal, the physician should not limit attention to only a part of the body, but should attend holistically to both the body and its environment. CM believes that in the healthy state there is a balanced and

harmonious relationship not only between the various organs and systems within the body but also between the body and its environment. When this multi-faceted relationship is disrupted disease may ensue.

In general, within a healthy body there is an automatic mechanism that regulates the various vital activities and adaptation to the changes in both internal and external environment, thereby preserving health. When a pathogenic factor overcomes this health-preserving adjustment response, the interactive balance, both within the body and between the body and the environment, cannot be maintained and then illness may ensue. CM has developed many methods of treatment intended to restore this holistic and dynamic equilibrium. This is a fundamental characteristic of CM therapeutics.

### III Struggle of Genuine-Qi and Evil-Qi

In CM the development of illness is directly influenced by the functional state of the body. When the body has low resistance against illness, evil Qi can invade easily. The development of illness concerns both genuine Qi and evil Qi. Genuine Qi is the body's capacity to perform its functional activities, to repel illness, to struggle against disease-causing agents, and to restore normal functions. Evil Qi refers to all the agents and factors that can potentially cause illnesses. Examples include the six weather evils, the seven passions, pestilence, Phlegm, fluid retention, stagnation of blood, and retention of food and drink (see Volume 1, Part I, Chapter 5). Therefore, CM considers that the progression of any illness reflects the struggle of genuine Qi and evil Qi.

Disease is the process in which an evil Qi causes an illness and the genuine Qi of the body fights off the disease-causing agent. In this process, the unity within the body and the unity of the body and its environment mean that there are continuous interactions. It is only when the body's genuine Qi is too weak to resist the evil Qi or the intensity of the evil Qi exceeds the genuine Qi's ability to resist that illness occurs. This struggle of genuine Qi and evil Qi persists from the moment of attack through treatment. It continues until the body's genuine Qi has gained sufficient strength to overpower the evil Qi.

In this entire process, changes in the intensity of the struggle of the genuine Qi and the evil Qi directly affect the course and prognosis of the illness. This is a core idea of the CM theory of illnesses. Its thorough understanding is essential to the proper study and mastery of diagnostics and treatment in CM.

## Section 3 Holism in CM

Holism in CM is an important philosophical concept for understanding physiology, pathology, diagnostics, and the treatment of diseases. It points to the unity and integrity of the body, and to the relationship between the universe and the human

body. Simplistically speaking, the universe is the macrocosm and the human body is a microcosm within it. Hence, holism encompasses two aspects. Firstly, the body itself is an organic whole. This concept is extended to the study of the physiology and the pathology of the body, and to the diagnosis and treatment of disease. Secondly, man and the universe maintain an opposing yet integrated and harmonious unity.

## I Human Body as Organic Whole

In CM the human body is composed of many kinds of viscera, sense organs and tissues, organized into several systems. Each system has its unique physiological functions. Between these several systems there are interactions of mutual restraint and mutual influence, and out of these interactions emerges the modern medical concept of holistic functional system. The last determines the body's organic holistic unity and maintains the equilibrium of its physiological and pathological functions.

Because of the intimate connection and inter-relation among the several component systems of the body, there can emerge the very complex interactions of the physiological and pathological activities. These interactions are centered on the *zang* organs and occur by means of systemic coordination via the meridians. The functions of all the organs are thereby organically integrated into a whole, and this integration can be seen in physiology, pathology, diagnostics and therapeutics in CM. For that reason it may be said that the theory of organ functions, which is centered on the five *zang* organs, is the cornerstone of the concept of holism in CM.

According to the principles of physiology the maintenance of normal functions depends on the one hand on the organs' ability to carry out their functions and on the other hand on the mutual support and restraint among them. The functional division and cooperation among all the body's systems reflect the concept of holism in CM. Each of the *zang* organs has its unique functions. Among them the heart has the leading role, as it is capable of governing and coordinating the activities of the other *zang* organs and the entire body. CM uses the opposition and unity of Yin and Yang and the mutual generation and restraint of the Five Elements to explain the regulated interactions among the *zang* organs and the other organs and tissues.

CM explores not only the laws of the vital functions of the body from the perspective of holism. It also examines the course of the whole body's reactions to illnesses in a region of the body. No region of the body can be functionally separated from the whole body; hence, pathological processes in any region inseparably affect those organs and meridians to which it is systemically connected. In turn, abnormally functioning organs and meridians can affect the functions of other organs and meridians. Here one encounters again the concept of holism in the theory of pathogenesis.

In the process of diagnosis in CM, the main underlying principle is "all internal changes are reflected by external manifestations." This principle makes possible the use of perceptible symptoms and signs of the sense organs, the tongue and the meridians to infer and grasp the abnormalities of the internal organs or the whole body, and further to make a firm diagnosis. This is the clinical application of the principle of unity between a region and the entire body.

For example, a disorder of the ear, with tinnitus and deafness, often results from insufficiency of the kidney or from Dampness-Heat attacking the liver and gallbladder. To obtain satisfactory therapeutic result it is necessary to apply the treatment method of strengthening the kidney or purging Dampness-Heat from the liver and gallbladder. Another is a disorder in the head. In treating with acupuncture the needle may be applied to the foot, on the left side if the disorder affects the right side of the head and on the right side if the disorder affects the left side. These approaches can all achieve satisfactory results because they reach the goal of eliminating the pathogenic evils through restoring the equilibrium of Yin–Yang for the entire body.

## II Unity of Human Body and Universe

The human body is an organic whole. It is also a small part of the universe. CM believes that humans live in nature, and in nature there are prerequisites on which humans rely in order to sustain life – such as air, water, sunlight, animals and plants, etc. Furthermore, the activities of nature directly or indirectly affect the human body's vital functions. The body must have the capacity to regulate and restrain itself in order to adapt to the changes in the external environment. If the body's capacity to regulate its own functions is compromised, or if the changes in the environment are excessive beyond the ability of the body to adjust, then illness may ensue.

Nature's influence on the human body is multi-faceted. CM greatly emphasizes the effects of seasonal changes, climate, geography and other natural phenomena on the body's vital functions. *Internal Classic* points out that the visceral functions, physiological equilibrium and the circulation of Qi and blood all change in response to the seasonal variations and the alternation of day and night. These responses help preserve the dynamic equilibrium of the body's Yin–Yang and the Yin–Yang of the environment. For example, in spring and summer the body's Qi and blood flow toward the body exterior; hence the pulses tend to be floating and large. In autumn and winter the body's Qi and blood flow toward the interior; hence the pulses tend to be deep and small. The alternation of day and night also elicits appropriate responses. In daytime the body's Yang-Qi circulates mainly in the body exterior, reaching its greatest extent at noon. Conversely, at night it moves internally, lodging there in a dormant state. The rhythm of these adjustments coincides with that of the movement of Yin–Yang in nature. Unexpected changes in the natural environment can induce illnesses.

To sum up, the human body and its environment are joined in an organic whole. Nowadays we call this chrono-biology. This postulates that in order to adjust to the various changes in nature the body has a regular rhythm, whether in physiological activities or in pathological changes. The changes of Qi, blood and Yin–Yang in the body correspond appropriately to the objective rise and decline of Yin–Yang in nature.

### III Unity of the Human Body and Social Circumstances

The human body is not merely a biological entity; it is also a psychological and social being in constant interaction with the external circumstances. Societal position, economic status, occupation, ideology, education background, as well as social relationships with others all influence its health. CM has long recognized this influence and has incorporated it in medical practice.

*Internal Classic* points out that in ancient China the wealthy people lived a life of indulgence, extravagance and dissipation, eating excessive amounts of fine and sweet grains and fatty meats. In consequence their internal organs tended to be weakened, their tendons and bones frail, and their Qi and blood floating and shallow. In contrast, the poor people lived a simple life, eating coarse foods and vegetables. Yet their internal organs were strong, their tendons and bones vigorous and their Qi and blood full.

The influence of a person's social circumstances on the body is an important part of CM. Violent social changes, a depressed economy, a very low living standard, war, chronic exhaustion, misfortunes, etc. – these can all seriously damage mind and body, and give rise to psychosomatic conditions and obscure disorders and make the course and severity of illnesses more complicated. Since different social circumstances can foster different causes and can induce diseases of different types and natures and even affect their progression, the therapeutic principles and methods to be applied must also differ. Thus, the *Internal Classic* stresses that to be an excellent physician one must cultivate very broad knowledge – that is, astronomy for phenomena above us, geography for phenomena beneath us, and the social sciences for events among us. Modern medicine today has also shifted its paradigm, from its original bio-medical mode to the current psycho-social-medical mode, emphasizing the inseparable connection between the human body and its social environment.

It can be seen from this discussion that CM begins with the viewpoint that the natural environment and social circumstances strongly influence a person's mind and body, so that it is necessary to analyze all aspects of the patient. In the course of treatment, it is essential to bear fully in mind his environmental and social context, including seasonal and local conditions. In regard to mental disorders brought about by social factors, CM aims to help the patient restore the body's physiological functions and his capacity to adapt to and perhaps to improve his social circumstances.

#### Section 4 Inquiry Methodology in CM

CM uses its distinctive theory and methods to study physiological functions and disease dynamics. This section introduces several commonly used methods.

## I Holistic Systemic Method

The holistic systemic method refers to a combination of the holistic and systemic approaches. In CM the internal organs of the body, its Qi and blood, its fluids, its sense organs and orifices, its limbs and bones, as well as the mental activities, are all closely linked and simultaneously influenced by the environment. Therefore, a disorder in one part cannot be separated from the whole body. When diagnosing and treating the patient the physician must consider the localized disorder as part of a disease that affects the whole body.

The holistic method of CM looks at the whole body and its environment instead of viewing various medical problems individually. This organic whole consists of a number of component parts, each with its individual functions, which are interacting and interdependent. Each system is a component part of a bigger system to which it belongs. The first application of this perspective is the theory of the Five Elements, which divides the vital activities of the human body into five functional systems and which then links all the things and phenomena of the universe into these systems. Thus, the human body is not merely an isolated whole, but is part of a much larger ecosystem. It is because of the unique connections between the systems in the body and those in the environment that physiology, pathology, diagnostics, therapeutics and the principles of prescriptions are all effectively established.

It can thus be seen that the holistic method is the guide and the systemic approach is the technique. These two complement each other and blend together organically, thereby becoming the guiding method for study and inquiry in CM.

CM divides the body into opposites along many dimensions, such as exterior and interior, upper and lower, ascending and descending, Qi and blood, nutritive Qi and defensive Qi, Yin meridians and Yang meridians, etc. These opposing constituents and their simultaneous unity together make up the organic whole, but the whole is not merely the sum of the parts. This is an important concept of system theory in modern methodology.

## II Classification by Analogy

This is analogy whereby things that are similar in some properties or appearance are assigned to the same classificatory category. All things assigned to the same category are regarded as connected. Appearance or special property may be regarded as reflections of objects, and common features are used to classify those objects not yet ordered or systemized. This assignment is then used to infer new knowledge.

The method of analogy is commonly used as a way for recognizing nature and man, as well as the relationship between them. For example, the functions and characteristics of the five *zang* organs can be classified by means of the Five Elements. The same approach can be used to classify and interconnect the many phenomena and things in both the human body and nature. This provides a theoretical basis for explaining the body's functional activities and pathological changes. For example,

the flow of blood in a vessel may be compared to the flow of water in a river. When water is chilled it freezes, and when heated it boils. Blood should therefore have similar characteristics. This then provides a plain and clear explanation for the symptoms of illnesses of Cold and of Heat.

This method can be applied widely. But it must be noted that there are limits. First, inference by analogy is of probability rather than necessity. All its results must be corroborated by experience. Second, the accuracy of reasoning from analogy is limited by the extent of correlation between the analogized objects. Analogy must not be used when objects have very slim connections.

### III Inferring the Interior from the Exterior

This technique refers to using observation of outward appearances in order to infer the changes inside the body. The ancient scholars thought that the essence of illness hidden in the interior of the body was always reflected in its exterior symptoms, so that studying the symptoms can, to an extent, lead to understanding of the interior pathological changes. Indeed, the course of diagnostics illustrates this technique.

In CM, the method of inferring the interior from the exterior is chiefly applied to two situations: in the development of the symptomatology of the internal organs, and in pathogenesis. CM holds that the five *zang* organs (heart, liver, lung, spleen and kidney) and the six *fu* organs (stomach, small intestine, large intestine, gall bladder, urinary bladder and sanjiao) inside the body are linked closely with the external tissues on the body surface. These organs and tissues of the exterior – the five sense organs, the four limbs and the head, and the nine orifices – are linked to the internal organs mainly by way of the meridians and by the activities of Qi and blood. It is because of this linkage that the physiological functions and pathological changes of the internal *zang* and *fu* organs must be reflected in the external tissues and organs. Observation and analysis of the external manifestations then must lead to the functional status of these organs. Many theoretical perspectives and principles have been derived by this method.

Under the guidance of holism CM has established a theoretical system that puts the *zang* organs at the center and further puts the heart at the center of the *zang* organs. This theory is intimately tied to clinical experience. It makes clear that any particular region of the body can to a certain degree provide information on the whole body as well as the region itself. In that way CM has evolved the characteristic features of its diagnostics and therapeutics, as well as its uniquely characteristic methods. Such techniques as diagnosis by the five facial colors, the changes in the tongue, the profiles of the pulse, the appearance of the ear, etc., are all techniques for inferring the processes of the whole body from the changes in a region of the body. Such inferences then lead to knowledge about the pathological changes of the internal organs.

The human body is a living organism. Many of its physiological functions cannot be comprehended from dissection of cadavers or even from animal experiments. The method of inferring the interior from the exterior does not require dismembering

the object of study or disrupting the body's inherent dynamic connections, but only observation of external manifestations in order to infer internal vital processes. It should also be noted that the vital activities of the human body are the most complicated of all living beings, because of the coming together with multi-lateral, multi-channel and multi-form systems. The knowledge derived from the application of the method of inferring the interior from the exterior far exceeds what can be obtained from simple direct regional observation. It has been used habitually over thousands of years of clinical practice. Within the province of CM it will become even more broadly applied.

## **Section 5 Symptom Analysis in CM**

### **I Treatment Selection Based on Symptom Analysis**

Treatment selection based on symptom analysis is a basic principle for recognizing and managing illnesses in CM and is also a fundamental law of clinical practice. It is formed under the guidance of holism, and is the practical application of CM theory at the bedside. It reflects the unique characteristics of the CM theoretical system.

The word symptom points to a clinical manifestation of illness, such as cough, vomiting, or headache. However, each illness presents with a set of symptoms that are linked, and this set varies with the stage of the illness. To identify the specific location of the illness, its cause, its properties and the pattern of interaction between the evil Qi and the genuine Qi, it is essential that the physician should analyze all these symptoms. Careful symptom analysis, to a large extent, can reveal the nature of the pathological changes at any given stage of progression of the illness.

Symptom analysis takes the information about the symptoms gathered through the four diagnostic methods (inspection, auscultation and olfaction, history, and palpation), analyzes and synthesizes them in order to identify the illness producing those symptoms. In a sense, symptom analysis approaches illness in reverse, moving from the clinical manifestations at a specific time to the internal processes.

Treatment selection is the selection of the appropriate principle of treatment and the specific method on the basis of the results of symptom analysis. In CM the appropriate therapeutic principle and treatment method are the most important, whereas the actual prescribed individual herbs are less important. This is so because the former is the prerequisite and guide for the latter. Conversely, the result of treatment reflects what is right or wrong in the analysis of the symptoms and in the selection of treatment method.

Among the basic steps of CM clinical practice, the four examination methods are the skills for collecting clinical information and symptom analysis is the technique for ascertaining the reliability of the symptoms. Symptom analysis is the basis for selecting the treatment method and the treatment method guides the composition of the prescription and the choice of herbs. These five steps – clinical information collection, analysis, treatment selection, prescription, and choice of herbs – are all

indispensable and they affect one another. Treatment based on symptom analysis is different from symptomatic treatment aimed only at relieving pain or another symptom. On the basis of complete clinical information and under the guidance of CM theory, it uses the technique of analytical thinking to ascertain the current condition of the patient, which varies according to the patient's unique characteristics. It then proceeds to determine which treatment method and which prescription to apply. For example, in a patient with chronic diarrhea merely giving an anti-diarrhea and an antispasmodic drug is not aimed at the underlying disease causing the symptoms of diarrhea and abdominal pain; nor is merely giving an antibiotic or an anti-inflammatory agent. It is necessary to ascertain, on the basis of complete clinical information and symptom analysis, that the patient's condition arises from the spleen's inability to perform its transforming and transporting functions. The proper treatment is to use the method of invigorating the spleen and augmenting Qi.

Treatment based on symptom analysis requires the physician to analyze thoroughly each patient's unique circumstances, and in the process of diagnosis and treatment to maintain the connection between and integration of the clinical manifestations, the set of symptoms, the treatment method and the prescription. This shows the special features of CM.

## **II Treating Same Illness with Different Methods and Treating Different Illnesses with Same Method**

Treatment based on symptom analysis is the fundamental principle for clinical diagnosis and treatment of illness. An illness may present several different sets of symptoms; conversely, different illnesses may present the same set of symptoms in the course of their progression. Thus, clinical CM may treat different illnesses with the same therapeutic method or the same illness with different methods.

When different patients contract an illness, because of the differences in their constitution, the weather and the season when the illness is first contracted, and the geographical and social environment, the same illness may manifest different symptoms. Therefore, the treatment must also differ. For example, a particular patient has been diagnosed to have the common cold. A CM physician is still unable to decide on the treatment method or the prescription. Depending on the differences of the pathogenic evils and the patient's individual response, the common cold can be divided into two types; namely, Wind-Heat invading the exterior, and Wind-Cold binding the exterior. The former requires the method of "using acrid and cooling herbs to relieve the exterior," whereas the latter requires the method of "using acrid and warming herbs to relieve the exterior." Thus, the physician must take a further step and accurately identify the type of illness he is managing before determining the treatment method to apply, if he is to obtain a satisfactory outcome.

Moreover, the same illness in the same patient, but at different stages in its course, may manifest different symptoms. Again, the treatment methods needed may differ. For example, consider a patient with peptic ulcer disease. According to the clinical symptoms at various stages, the correct diagnosis may be "deficiency-Cold of the

spleen and the stomach,” “excessive liver-Qi attacking the stomach,” “accumulation of Dampness-Heat in the stomach,” or something else. It is necessary to apply a different treatment method and prescription at these different stages to obtain satisfactory results.

Different illnesses sometimes may manifest the same set of symptoms (or overlapping sets) at various stages in their courses. For example, prolapse of the rectum and prolapse of the uterus are different illnesses, but in their courses of progression they may both exhibit the same set of symptoms related to the sinking of middle Qi (severe Qi-deficiency of spleen and stomach). Therefore, they may both be treated with herbs that augment middle Qi. Another example concerns different patients with chronic lumbago, edema, diarrhea or enuresis. If by symptom analysis they are all found to have deficiency of spleen-Yang and kidney-Yang, they may all be treated by the method of warm tonification of spleen-Yang and kidney-Yang.

It can be seen from this discussion that in CM therapeutics the physician attends not only to the differences or similarities of “illnesses,” but more importantly to the analysis of the whole set of symptoms. If the set of symptoms is the same then the treatment is almost the same with modifications of the prescription according to natures of the affected organs and tissues of disease. If the set of symptoms is different then the treatment is different. This approach of aiming at the changing symptoms in the progression of a illness by using different identification methods reflects the spirit of treatment selection by symptom analysis.

It is worth mentioning that the combination of symptom analysis and illness differentiation will help extend the search for treatment methods and improve therapeutic effectiveness. For example, when treating a patient with bacillary dysentery, adding herbs with anti-bacterial and anti-inflammatory actions to those indicated by symptom analysis will enhance the curative effect.

## **Section 6 Health Preservation in CM**

Prolonging life span and preserving health through prevention of illness and injury are characteristic features of the unique preventive health perspective of CM. As early as 2,000 years ago the discipline of health preservation in CM was already well established, with a wealth of experiences and theoretical knowledge. The theories and principles of preventive health developed in those days are still effectively guiding modern health preservation and medical practice.

### **I Correspondence between Human Body and Nature; Conforming to Nature**

CM holds that as a part of nature the human body is closely connected to changes in the natural environment. The cycle of the seasons in the year, the daily change of day and night from dawn to dusk, the differences of geographical surroundings

and so on – all these exert important influence on the physiological functions and pathological changes of the human body. As the *Spirit Pivot* states: “Man is related to heaven and earth, and corresponds with the sun and moon.”

Guided by this concept CM believes that when a person comprehends and masters the regularities of the seasons and weather patterns and the unique features of different natural environments and can adjust to the changes in those environments, then the person can maintain harmony with nature. By means of this harmony the goal of health preservation and disease prevention can be attained. The *Plain Questions* states: “Yin–Yang and the seasons are the beginning and end of all things.” Again, “The seasons and Yin–Yang are the root of all things. Therefore, the wise man nurtures Yin in spring and summer and nurtures Yang in autumn and winter, in order to conform to the root.”

Hence, the theory of preventive health in CM stresses that the vital activities of the human body must all comply with the objective regularities in the waxing and waning of the seasons and Yin–Yang; otherwise, illness may ensue and may harm bodily functions. The *Spirit Pivot* points out: “In preserving health the wise man will surely follow the seasons and adjust to the cold and heat, modulate joy and anger and live with serenity.” This advises people to regulate appropriately all their mental activities, their daily rising and retiring, the seasonings of their foods and drinks in conformance to seasonal changes. Thus, of the seasons of the year spring and summer belong to Yang and autumn and winter belong to Yin. The timeline of nature follows the cyclic progressions in weather to produce the changes of spring sprouting, summer growth, autumn harvesting and winter storage. Accordingly, people should follow nature and protect their Yang–Qi in spring and summer, and protect their Yin–Qi in autumn and winter.

Nevertheless, though humans and nature correspond in CM man is not passive. Man can know the patterns of change in the natural world and can adapt to nature. More than that man can gradually grasp and exploit these patterns in order to actively modify nature, thereby preserving health and avoid illnesses. The general ethos in society today is to promote health and prevent illness. This accords with the overall thrust of CM.

## II Preserving Both Body and Vitality; Nurturing Zang–Fu Functions

The important concept of simultaneous preservation of the body and vitality derives from the theory of the unity of the body and vitality.

Preservation of the body principally means the protection and nourishment of the *zang–fu* viscera, the essence, Qi and blood, the limbs, the sense organs and the orifices, and so on. The body is the residence of vitality. Only if the body is normal can the spirit be normal. The Ming dynasty physician, Zhang Jingyue, repeatedly stressed in his book, *Treatise on Preserving the Body*, the importance of taking good care of the health of the body. He asked: “For a man who is good at keeping himself in good health, how can he not begin with the preservation of the body

to provide a healthy residence for the mind? For a person who is good at curing illnesses, how can he not begin with curing the body of problems to establish a sound basis for recovery and vigor?" The *zang* viscera constitute the center of the functional activities of the body. The first step in preserving the body, then, is the preservation of the Qi and essence of these organs and the regulation of the functions of the *zang* and the *fu* organs. In particular, preservation of the body is first to preserve the heart, in order to assure the health and function of all the visceral organs and to harmonize their activities. Concretely, many activities contribute to the preservation of the body. Examples include proper diet, balance between work and rest, moderate living, avoidance of extreme cold and heat, as well as physical training, Chinese Qi Gong and Tai Ji boxing, and other activities.

Preservation of vitality principally means achieving a balance among the many emotions. In CM the spirit and changes in the emotions are important components of the person's vital activities. In normal circumstances, vitality is a reaction to the various stimuli from the external environment. It is not only the expression of normal psychological activities in the course of life, but also can strengthen the body's constitution and resistance to illness and prolong life. If the spirit and emotional disturbances are excessive or are continued for too long, exceeding the limits of homeostasis, then the *zang* organs may be injured or Qi may be affected; many different illnesses may ensue. This underscores the importance of the spirit and emotional health. The theory of health preservation in CM emphasizes that to preserve the spirit is necessary to keep the mind calm, to reduce emotional stress and to avoid unnecessary joy or anger, in order to avoid injuring vitality or genuine Qi.

In short, the body is the residence for vitality and in turn vitality is the functional activity of the body. Preserving vitality can safeguard a perfect body while ensuring a perfect body can enhance vitality. The two complement each other and neither can exist alone.

### III Activity and Quiescence

The CM theory of health preservation maintains that Qi and blood need to be active whereas vitality needs to be calm. Only when activity and quiescence are appropriately balanced can the goal of preserving health and preventing illnesses be achieved.

Activity includes work and exercise. *Lu's Spring and Autumn*, from the Warring States era, points out: "Running water is never stale and a door-hinge never gets worm-eaten, because they are active. This is also true of the body and Qi." If the body is not active, essence and Qi do not move; and the movement of Qi becomes impeded leading to stagnation and illness. Over the course of many years, many effective physical fitness exercises have been devised, such as animal-mimicking boxing, *Taiji* boxing, sinew-replacing exercise, etc. According to the theory of health preservation, one need only persist in such fitness exercises, thereby facilitating the movement of Qi and blood and avoiding stiffness of the joints, in order to strengthen

the body's resistance to illness. Modern medicine corroborates the fact that regular exercise can enhance the body's metabolic functions, invigorate all the organs and defer their senescence.

Quiescence is the opposite of activity. It includes serenity (absence of stress) of the mind and quietness of the body, and occupies an important role in the CM theory of health preservation. The *Internal Classic* points out: "With serenity and quietness the exterior structures of the body become closed; though Wind is strong and harsh, it cannot harm the person." Physicians of subsequent generations have also emphasized the importance of keeping a serene mind and restraining strong desires. For example, certain aspects of Chinese Qi Gong do not involve any movement of the limbs or trunk. By assuming certain well-defined postures and engaging in specified breathing techniques and meditative exercises, the person can carry out self-training and self-regulation and attain the goal of regulating, restoring and improving the body.

In the CM theory of health preservation both activity and quiescence must be carried out to moderation. Any excess or insufficiency will adversely affect one's health, facilitating the development of illness. The *Plain Questions* states: "Protracted use of the eyes impairs blood; protracted lying down impairs Qi; protracted sitting impairs the muscles; protracted standing impairs the bones; and protracted walking impairs the tendons." Therefore, every person should undertake physical training, but regularly and to an appropriate extent; every person should use the brain diligently, but not to the point of mental fatigue. The goal is to be active without exhaustion and quiescent without lassitude. In short, activity and quiescence are opposed yet complementary. To preserve health, avoid illness and extend life span it is necessary to engage in both to an appropriate degree. Neither must be neglected nor taken to excess.

It should be further pointed out that the goal is to nurture and strengthen genuine Qi in order to preserve health. Genuine Qi is the body's capacity to function normally, to resist illness and to recover from illness or injury. In CM the underlying cause of the development of illness and of premature aging is the weakening of genuine Qi of the body. Genuine Qi can determine whether an illness develops or not, its course of progression and the course of the body's recovery. In normal circumstances the body's genuine Qi is abundant, so that evil Qi can invade only with difficulty and the body does not fall ill. But it does not eliminate evil Qi's ability to induce illness, and under certain conditions evil Qi can even take charge. CM advocates taking measures to avoid the attack of evil Qi; this is also an important aspect of health preservation and disease prevention.

In the course of recovery of health from illness, supporting genuine Qi and strengthening the body's constitution are an important principle. Supporting genuine Qi enhances the body's capacity to resist illness and to regain health, and promotes the expulsion of evil Qi. It is therefore a very important part of health promotion. In the light of this theory, the key to health preservation is the preservation of genuine Qi by such practices as physical training, proper diet, regulating mental activities and establishing a science-based lifestyle.

## **Guidance for Study**

### **I Aims of Study**

This chapter introduces the outlook of CM methodology. It attempts to familiarize the learners with the basic approaches of CM and its modes of thinking. It provides them with the necessary tools to build a solid foundation for further studies of CM.

### **II Objectives of Study**

After completing this chapter the learners will:

1. Be familiar with the basic concepts and main contents of the view of life and the view of illness in CM;
2. Be familiar with the basic methods of inquiry in CM and the features of diagnostics;
3. Master the basic concepts and contents of holism in CM and of treatment based on symptom analysis;
4. Be familiar with basic principles of health preservation of CM.

### **III Exercises for Review**

1. What is the view of life in CM?
2. How does CM understand illness? And what significant guidance does this outlook have in clinical practice?
3. How does CM understand the concept of holism of CM? Give examples to explain its applications.
4. What is “classification by analogy?” What is “inferring the interior from the exterior?” Give some facts to explain their application in CM.
5. How do you define symptom analysis? Why is it thought to be the basic processes of diagnosis and treatment in CM?
6. What is the essence of “treating the same illness with different methods” and “treating different illnesses with the same method?” Explain, with examples, how they guide clinical practice in CM.
7. What are the basic principles of health preservation in CM?

# Chapter 3

## Structure and Functions of the Human Body

### Section 1 Visceral Manifestation Theory

#### I Formation of Visceral Manifestation Theory

The human body is a very complex organic body. It is a functional system composed of many tissues and organs. Its principal components include the *zang* and *fu* viscera, the non-organ structures, the sense organs and orifices, the material bases of vital activities (essence, Qi, blood, body fluids, etc.) and the meridians. Knowledge of the structure and functions of the body systems in CM has been obtained through observation of the manifestations of many physiological functions and pathological phenomena in the body. As this knowledge accumulated, it was taken a step further and became formulated as the visceral manifestation theory.

The foundation established by this theory comprises principally the following three aspects.

- 1. Ancient Anatomical Knowledge.** As early as the eras of the Spring-Autumn and of the Warring States, *Huangdi's Internal Classic* already contained descriptions of findings from the dissection and research of the human body. For example, the *Spirit Pivot* states: "A man is about eight *chi* (about 64 in.) in height. His size is measurable on the skin and flesh, and his body may be dissected and inspected after death. The firmness or fragility of the *zang* viscera, the size of the abdomen, the quantity of the food (in the stomach), the length of the vessels and the clarity or murkiness of the blood . . . they all have measures." The *Internal Classic* further contains a more detailed account of the circulation of blood, describing not only the formation of blood, its nature and functions, but also the source that powers its circulation, the internal organs that it flows through, and its rate of flow. This early anatomical knowledge established the foundation of the visceral manifestation theory.
- 2. Long-Term Observation of Physiological and Pathological Phenomena.** By applying the principle of "inferring the interior from the exterior" the ancient physicians carefully studied, in detail and over a long period of time, the external manifestations of the physiological and pathological phenomena of the

human body; and gradually recognized their rules. For example, when the skin was chilled the common cold could develop easily and manifest such symptoms as nasal discharge, cough, and the absence of sweating. From such observations the ancient physicians inferred the relationship of the nose and skin to the lung. Based on this relationship they formulated the theory that “the lung has its orifice in the nose” and “the lung governs the skin.” Another example was that when people were anxious they often had a poor appetite and dyspepsia, and occasionally abdominal distention. After many years the ancient physicians linked the mental distress of “brooding” to the digestive function of the spleen, leading to the theory that “the spleen controls brooding” and “excessive brooding damages the spleen.” These were concrete examples of inferring physiological function from pathological changes.

3. **Summarization of Practical Experience.** During the long period of struggle against diseases, the ancients observed that certain pathological phenomena were related to the dysfunction of certain viscera. In particular, they learned to infer the functions of the viscera from the results of therapeutic intervention. For example, the relationship between the liver and the eyes was difficult to establish in physiology. However, many types of eye disorders could be cured by techniques that treated the liver. Based on these observations they gradually formulated the theory that “the liver has its orifice in the eyes.” Another example was that the healing of bone fractures and the stimulation of scalp hair growth that resulted from strengthening the kidney. From that the physicians formulated the theory that “the kidney governs the bones” and “the splendor of the kidney is in the hair.”

It is clear that the theory of visceral manifestation in CM is based on definite anatomical knowledge. It principally employs the research method of empirical observation of the people’s daily lives and of bedside clinical activities over many years, formulation of theory from these observations, and followed by refinement through repeated clinical corroboration – finally culminating in the unique theory of visceral manifestation.

## II Characteristics of Visceral Manifestation Theory

The term “visceral manifestation” first appeared in the *Internal Classic*. The theory of visceral manifestation is an important component of Chinese medicine, and is basic to the study of the physiological functions of each of the viscera, their pathological processes, and the interrelationship between the viscera. There are three major categories of the viscera: the *zang*, the *fu*, and the irregular organs. There are five *zang* organs: the heart, the lung, the spleen, the liver and the kidney. There are six *fu* organs: the gallbladder, the stomach, the small intestine, the large intestine, the urinary bladder, and the sanjiao. There are five irregular organs: the brain, the bone marrow, the bones, the blood vessels, and the uterus.

The *zang* viscera share two main functional characteristics. The first relates to mental activities. The various mental activities are attributed to the *zang* viscera; for

example, “the heart houses the mind,” “the lung houses the soul,” “the spleen houses intention,” “the liver houses the ethereal soul,” and “the kidney houses the will.” The second is that the *zang* viscera house essence and Qi.

The *fu* viscera share the functional characteristics of receiving, digesting and transforming food and drink. The ***Plain Questions*** states: “The five *zang* viscera house the essence and Qi but do not discharge it; thus they are full but cannot be filled up. The six *fu* viscera transform and digest matter but do not store it; thus they are filled, yet are not full.” This quote not only summarizes the physiological functions of the *zang* and *fu* viscera, but also points out their fundamental differences.

Visceral manifestation theory has its unique characteristics. To understand correctly and master its contents, the learners must pay adequate attention to the following.

The first point is that in CM the *zang* and *fu* viscera are not only morphologic units, but are also the important functional concepts and units including many physiological functions and pathological changes. Take the *zang* organs for example. Though their names – heart, lung, spleen, liver, and kidney – are the same as those used in modern anatomy, in physiology and pathology they are quite different. In the theory of visceral manifestation of CM the functions of a particular *zang* organ can encompass the functions of several organs of modern anatomy; and the functions of a particular organ in modern anatomy may be attributed to several *zang* and *fu* organs. For example, the functions of the heart in CM include not only those attributed to it in modern medicine but also some of the functions attributed to the nervous system. On the other hand, some of the functions of the nervous system of modern medicine are attributed in CM to many *zang* and *fu* organs, such as the heart, the liver, the spleen, the kidney, the gallbladder, etc.

The second point is the fact that CM assigns all the important physiological functions in the human body to five functional systems. These systems are centered on the *zang* viscera, and encompass the *fu* organs, the five sense organs, and the many tissues and non-visceral organs, each system being linked by means of its meridians. At the same time, there are relationships of generation and restraint between these five systems. In fact, these five systems – the heart system, the lung system, the spleen system, the liver system and the kidney system – are aspects of the Five Elements acting in the human body.

The third point is the fact that in discussing the physiological functions and pathological changes of the viscera, in general the *zang* are described in much detail and the *fu* and irregular organs are described only briefly.

## Section 2 *Zang* Viscera

The “*zang* viscera” is a collective term for the heart, the lung, the spleen, the liver and the kidney. Although each has its own physiological functions, under the guidance of the heart the functions of these five organs are inter-dependent and cooperate to maintain all the normal vital activities of the body.

## I Heart (Including Pericardium)

The heart is located in the thorax above the diaphragm. It is surrounded by the pericardium. The heart is the house of the mind, the master of blood, and the governor of the vessels. Among the Five Elements it belongs to Fire. Complemented by the other *zang* organs it has the function of controlling all the vital activities of the body. Thus, the *Plain Questions* states: “The heart is the lord of all organs; it is where the spirit arises.”

### 1 *Physiological Functions of Heart*

#### i Governor of Blood and Governor of Blood Vessels

Mastery over blood has two meanings. First, the heart takes part in the formation of blood. Secondly, the heart promotes the circulation of blood. The heart beats continually, propelling the blood through the vessels so that all the organs and tissues receive nutrients and can maintain their normal vital activities. This is why the heart is known as the organ of motive force for blood circulation. In CM it is the heart's Qi that enables its normal beating and that provides the motive force for the circulation of blood. The blood that is controlled by the heart is called heart-blood. By the theory of Yin–Yang Qi belongs to Yang and blood to Yin. This is the reason for the terms “heart-Yang,” and “heart-Yin.” Coordination of Qi, blood, Yin and Yang of the heart maintains a relative equilibrium of normal physiological activities in the body.

Mastery over the blood vessels also has two meanings. First, structurally the heart is connected to the blood vessels. Second, the vessels are the passages through which blood is propelled by the heart. These vessels deliver the blood to all parts of the body. The heart controls the vigor of this flow and the degree of this vigor can be judged directly from changes in the pulse profile.

These two functions of the heart are intimately and inseparably related. Only when the heart-Qi is sufficient can the heart keep the blood flowing normally within the vessels.

Whether the heart's function is normal or not can be examined objectively by the pulse profile, the complexion and other findings. For example, when the heart-Qi is abundant and the blood full, so that the heartbeat is strong, then the blood will flow smoothly. This is manifested as a regular pulse that is forceful, at an even rate (4–5 beats per breath), and a red and lustrous complexion. Conversely, if heart-Qi and heart-blood are insufficient, so that the heartbeat is weak, then the pulse is irregular and thread-like or feeble, and the complexion is pallid and lusterless. If the heart-blood is stagnant, then there may be such symptoms as dusky complexion, cyanotic lips, palpitation of the heart, tightness in the chest, precordial pain, and a pulse that is hesitant and intermittent (see [Fig. 3.1](#)).

The Heart

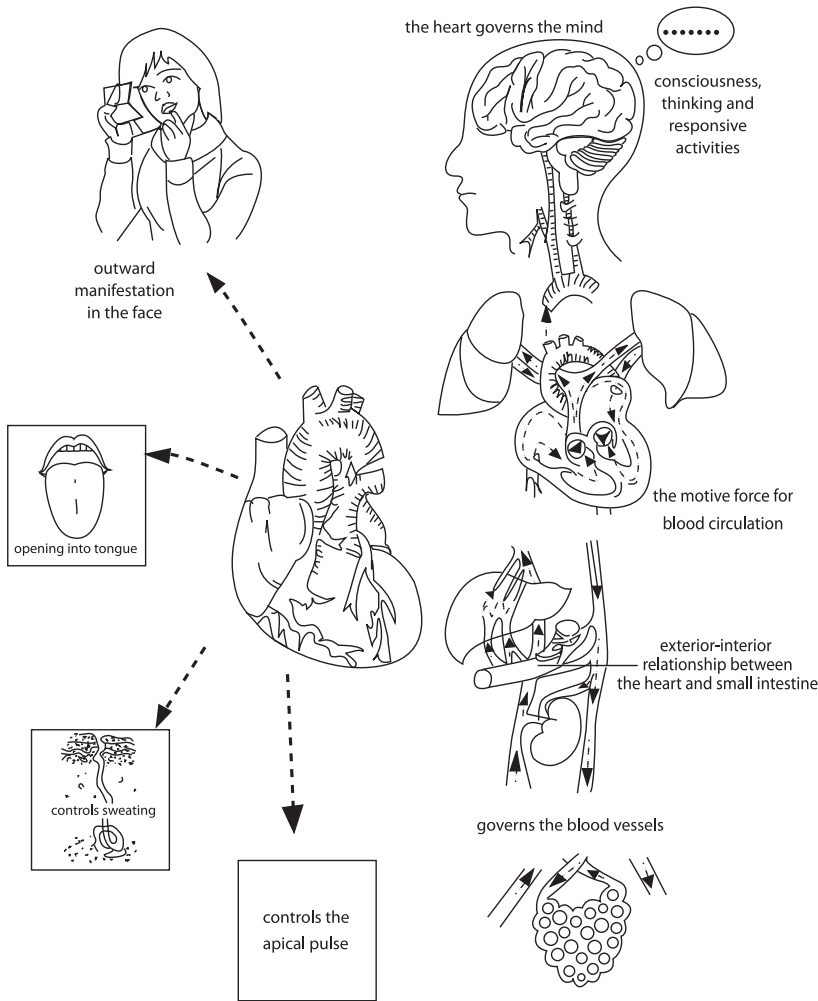


Fig. 3.1 The Heart

ii Governor of Mind

This function is also known as “the heart housing the mind.” In CM the term vitality has a broader meaning and a narrower meaning. In the broader meaning it is the outward activities of the life of the whole body. It encompasses the body’s complete form and function, including its complexion, expression of the eye, speech, response, movement of limbs and trunk, etc. In the narrow sense, vitality is the mind that is governed by the heart. It encompasses the spirit, consciousness, thinking and related activities.

Modern physiology holds that all these mental activities are attributed to the physiological functions of the brain; and these are a response of the brain to the external objective environment. In CM these mental activities are attributed to the physiological functions of all five of the *zang* viscera. The *Plain Questions* states: "The heart houses the mind. The lung houses the soul. The liver houses the ethereal soul. The spleen houses intention. The kidney houses the will." Though the activities of the mind have to do with all five of the *zang* organs, principally they are controlled by the heart. Apart from the influence of ancient philosophical thought this conclusion is mainly based upon clinical experience. First, blood is the material support for mental activities. Second, mental disorders are usually cured by methods of treating the heart.

The heart's physiological functions of governing the mind and governing the blood and blood vessels are closely interrelated. Because blood is the material support for mental activities, when blood is full the mind is nourished. Only then are the mental activities normal, so that the person is alert, consciousness is healthy, thinking is quick, and responses are prompt. The body then maintains a healthy balance with the external world. Conversely, if blood is insufficient the mind loses its nourishment. This may be manifested as dispiritedness, slowed responsiveness, insomnia and excessive dreaming, forgetfulness and restlessness, and related symptoms. If there is Heat in the blood the mind may become deranged, manifesting agitation, delirium, and even loss of consciousness.

The heart's functions depend upon the coordinated actions of heart-Qi, heart-blood, heart-Yin and heart-Yang. In general, the heart's control over blood and the blood vessels depends upon heart-Qi for motive force and upon heart-Yang for warmth. Heart-Qi promotes blood circulation and prevents blood stagnation, and heart-Yang warms and activates blood to avoid stasis due to Cold. The heart's control over the mind depends upon an adequate supply of heart-blood and heart-Yin. If heart-blood and heart-Yin are insufficient, Yin-blood fails to nourish the mind, resulting in such symptoms as agitation, delirium and dream-disturbed sleep. If heart-Qi and heart-Yang are injured, heart-blood may become static, resulting in such symptoms as tightness in the chest, palpitation of the heart, pain in the heart, and cyanotic lips and tongue.

## ***2 Relationship of Heart to Other Organs and Tissues***

### **i Governance of Blood Vessels Manifests in Face**

As mentioned above the heart controls the flow in the blood vessels, which are the pathways for the movement of Qi and blood, so that both move in an orderly fashion and following designated routes in order to deliver nutrients to the entire body. Only when heart-Qi is strong can the normality of the physiological functions of heart-blood be maintained.

CM believes that the fullness or deficiency of the essential Qi of the viscera can be revealed in the organs in the exterior of the body. This is known as the “outward appearance of quintessence, the five *zang* organs each having its manifestation.” Manifestation in the face means that changes in the color and luster of the complexion reflect the fullness or deficiency of Qi and blood. If heart-Qi and heart-blood are abundant, the complexion will be lustrous and moistened. Conversely, if heart-Qi and heart-blood are deficient, the complexion will be pallid and lusterless. If heart-blood is static, then the complexion will be cyanotic. If there is Heat in the blood, the complexion will be red. If heart-blood has collapsed, the complexion will be pallid and withered.

## ii Opening Orifice in Tongue

This is known as “the tongue is the sprout of the heart.” The tongue is like a mirror that can reflect the heart’s condition and functional state. A collateral meridian of the Heart Meridian of Hand-Shaoyin extends into the root of the tongue. The heart’s Qi and blood pass through the meridians and reaches the tongue, thereby maintaining the tongue’s normality and functions. The tongue has two main functions: taste, and assisting in the production of speech. Both functions depend upon the heart’s functions of governing blood vessels and governing the mind. For example, if the heart’s Qi and blood are abundant, the tongue will be supple and agile, speech clear and fluent and taste keen. If Qi and blood are insufficient, the tongue will be pale and taste blunted. If heart-Fire flames up, the tip of the tongue will be bright red and the tongue may have ulcers or sores. If heart-blood is static, the tongue will be dusky or covered with sores. If Heat invades the pericardium or Phlegm obstructs the orifices of the heart, the tongue will be stiff and speech stammering.

## Appendix: Pericardium

The pericardium is a membranous envelope of the heart. Its main physiological function is to protect the heart from injury and to promote the circulation of Qi and blood. In the CM theory of visceral manifestation, the heart is the master *zang* organ and therefore must not be invaded by evil Qi. Because the pericardium is the shield for the heart, CM believes that when evil Qi invades the heart it must first attack the pericardium. Hence, severe warm diseases manifested such mental symptoms as high fever, fainting, delirium, which are induced by the Heat evil, are ascribed to “Heat entering the pericardium.” Similarly, such symptoms as loss of consciousness and impeded tongue, which are induced by Phlegm-Heat, are ascribed to “Phlegm obscuring the heart-orifices.” It is thus clear that the symptoms of disorder of the pericardium are actually manifestations of disturbances of the spirit. They can therefore be cured by methods of treating the heart.

Hence, the pericardium is not an independent organ, but is really an appendage to the heart.

## II Lung

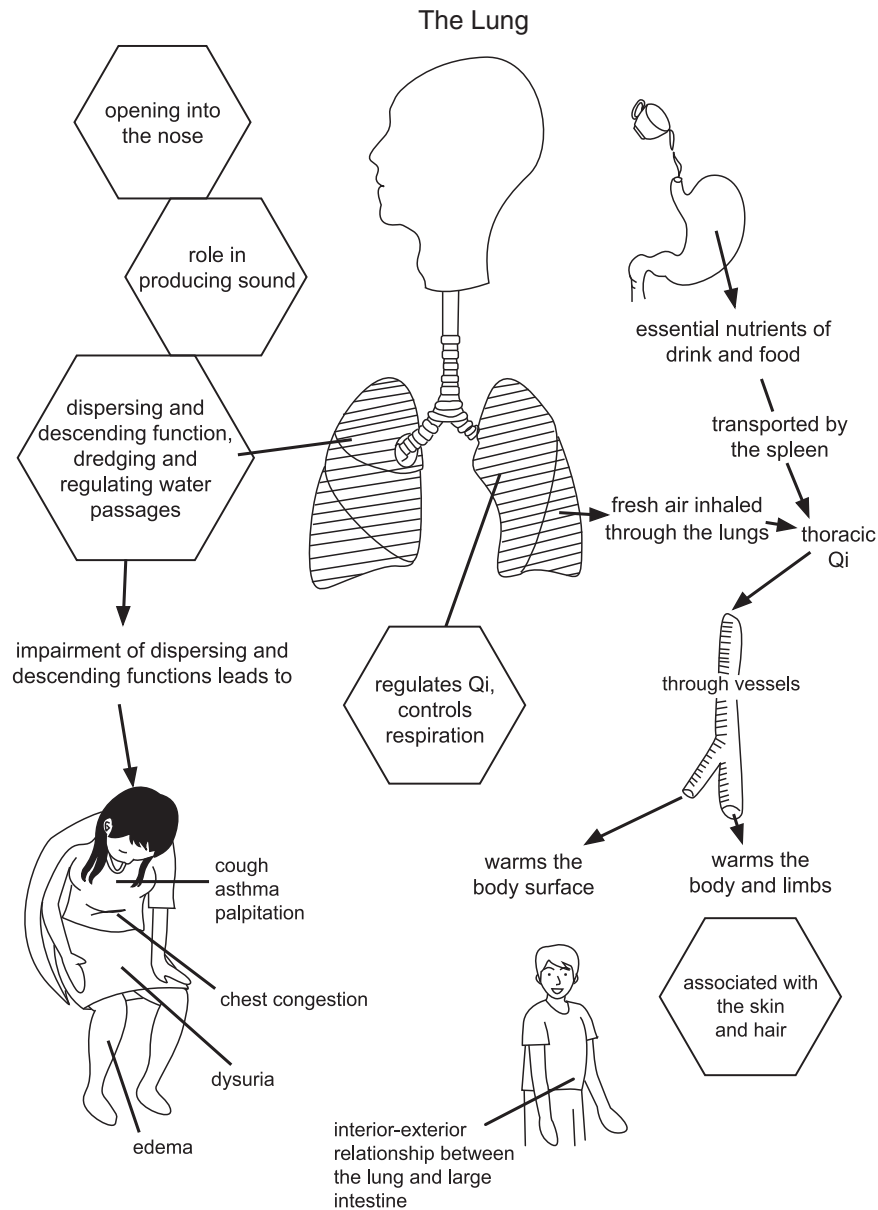
The lung contains two main divisions, one each on the left and right, and both within the thorax. It is connected above with the trachea, which opens into the nose. Among the *zang* organs, the lung has the highest anatomical position; because of that it is sometimes called the “splendid canopy.” Since the lobes of the lung are delicate, intolerant of cold or heat, and highly susceptible to invasion by external disease evils, the lung is also known as the “delicate organ.” The lung is the chief organ for the regulation of respiration and for managing gas exchange between Qi and the body. It also has the capability of depuration and dispersion.

### 1 *Physiological Functions of Lung*

#### i Regulation of Qi

The lung regulating Qi means that Qi of the entire body is under the control of the lung. Thus, regulation of Qi by the lung has two meanings: the lung regulates respiration, and the lung regulates Qi of the entire body.

- 1. Regulating Respiration.** The lung is the respiratory organ through which the gases from inside and outside the body are exchanged. During the processes of metabolism, an enormous amount of fresh air is consumed and simultaneously an enormous amount of spent air is produced. The lung's respiratory function ensures that the fresh air is inhaled and the spent air is exhaled, thereby enabling the metabolic processes to proceed normally. This is “expelling the stale and taking in the fresh.” If the lung's respiratory function is normal, air moves smoothly through the passages and the respiration is rhythmic and even. Invasion of the lung by evil Qi may cause tightness in the chest, cough, dyspnea, and impendance. If the respiratory function is lost, then fresh air cannot be inhaled and stale air cannot be exhaled, leading to cessation of all vital activities (see [Fig. 3.2](#)).
- 2. Regulating the Entire Body's Qi.** This function is mainly seen in the following two aspects. First, the lung helps in the formation of Qi, especially thoracic Qi. Thoracic Qi is formed when the essential nutritious substances of food and drink, extracted by the stomach and transported by the spleen, is combined with fresh air inhaled by the lung. Assistance from the lung is also necessary for thoracic Qi to be distributed to the entire body through the blood vessels. Thus by controlling the formation and distribution of thoracic Qi the lung acts to control Qi of the entire body. Second, the lung controls the basic movement of Qi throughout the body, which includes exiting and entering, and ascending and descending. The respiratory action of the lung is precisely the movement of Qi in the body. Only the lung's incessant, rhythmic and even respiration can ensure the harmonious balance of Qi's in-out and up-down movement in the body, and



**Fig. 3.2** The Lung

further to maintain the body's normal physiological functions. If this function of the lung is abnormal, then the formation of thoracic Qi and the activity of the entire body's Qi will be affected, giving rise to such symptoms as shortness of breath, a weak and low voice, tiredness and weakness.

## ii Confluence of All Vessels; Assisting Heart to Circulate Blood

Confluence of all the vessels has two aspects. On the one hand, the vessels converge as they flow into the lung. On the other hand, several of them link the lung and the heart together structurally. The physiological significance is that blood from the entire body flows into the lung, where by means of the lung's respiratory function it engages in gas exchange. It then flows back to the entire body. The **Plain Questions** states: "The lung is like a ministerial official; with it comes functional coordination." This metaphorically compares the lung to the premier of a state and the heart to the king. The lung controls Qi of the entire body and regulates respiration. Since the circulation of blood depends upon the motive force from Qi, the lung assists the heart to drive blood circulation. For example, in chronic cough caused by lung-Qi deficiency, deficient Qi is unable to push the blood to flow properly. This Qi deficiency can lead to stasis of blood, giving rise to such symptoms as a forceless cough, dyspnea, a tightness in the chest, palpitation of the heart, and cyanotic lips and tongue.

It can be seen that blood circulation results from the cooperation of the heart and the lung. Heart-Qi provides the motive force for the flow and lung-Qi provides assistance.

## iii Dispersion; Depuration; Unclogging Water Pathways

Dispersion, one of the lung's main physiological functions, has three aspects. It disperses and distributes defensive-Qi to the surface of the body, where it can carry out its warming and protective actions. It distributes Qi, blood and body fluids to the entire body, where they nourish and moisten all organs and tissues. It disperses and expels from the body the stale air produced by metabolism in order to complete gas exchange, and it discharges fluids through the sweat pores.

Depuration means purifying and descending. This function also has three aspects. The lung inhales fresh air from the natural environment and conveys it downward to the kidney, so as to maintain deep, even and smooth breathing. After the essential substances of drink and food have been transformed by the spleen, the lung distributes them throughout the body; in this way it has an important role in the metabolism of fluids and in the maintenance of the proper balance of metabolism. The lung also eliminates the pathogenic poisons, keeps the respiratory tract clear, and assists the large intestine in the excretion of wastes.

The unclogging function of the lung enables it to carry out its dispersing and purifying functions. The excretion of an appropriate amount of sweat helps regulate water balance and metabolism. When Qi moves so does water. When lung-Qi moves downward fluids also move downward to reach the kidney, where they are converted into urine. The urine is stored in the urinary bladder to await excretion. These functions are the basis for the sayings, "the lung regulates the passage of water" and "the lung is the upper source of water."

The two main functions of the lung, dispersion and depuration, complement each other. Under physiological conditions, they act together to maintain normal respi-

ration. Under pathological conditions, they also affect each other. Without normal dispersion there cannot be normal depuration, and without normal depuration there cannot be normal dispersion. If these two functions are unbalanced there may be tightness in the chest, cough, dyspnea, edema, and Phlegm retention.

## 2 *Relationship of Lung to Other Organs and Tissues*

### i Association with Skin and Hair

The skin and hair refer to the entire organ that covers the body, including the dermis, the hair and the sweat glands. The skin and hair must be warmed and moistened by defensive Qi and body fluids. Physiologically, the main functions of the skin and hair are to secrete sweat, protect the exterior of the body from exogenous evils and regulate the body temperature. These functions are closely tied to those of the lung. First, the lung controls defensive Qi. It distributes defensive Qi and essential nutrients to the skin and hair and by doing so warms and moistens them. Second, the skin and hair work closely with the lung to regulate respiration by opening or closing the sweat pores. The *Plain Questions* terms the sweat pore the “portal of gas.” In pathology the lung and skin and its hair also affect each other. For example, when wind and cold attack the body surface they generally enter by the skin and hair, then proceed to affect the lung’s dispersion function. This often results in aversion to cold, nasal blockage, fever, and cough. If lung-Qi is deficient and fails in its dispersion function, it is unable to distribute defensive-Qi and fluids to the body surface. This reduces the skin’s ability to ward off disease. There may then be profuse sweating and increased susceptibility to disease. The skin may appear pallid and wan, and the hair may show withering. Hence, in CM there is the saying: “The lung has its outward manifestation in the skin and hair.”

### ii Opening in Nose

The nose is an organ of ventilation and is the external orifice for the lung. Its physiological functions are principally ventilation and olfaction. In CM the nose’s capability depends upon the functions of the lung. If lung-Qi is harmonious the nasal passage is unobstructed so that breathing is smooth and the sense of smell effective. Thus the *Spirit Pivot* states: “When lung-Qi permeates the nose the lung and the nose can know fragrance and foul odor.” In pathology, lung diseases and nose diseases often influence one another. For example, when evil Qi attacks the lung the lung may lose its ability to disperse. This leads to dysfunction of the nose and may result in nasal blockage, nasal discharge, anosmia, and nosebleed. Conversely, when exogenous evils injure the person they mostly enter through the nose or mouth and can directly affect the lung. In clinical practice the physician often approaches disorders of the nose by treating the lung.

### 3 *Throat as Gateway for Lung*

The throat is the passageway through which the air of respiration exits and enters. It is also the organ for generating voice. The Lung Meridians pass through the throat, linking the passage of air and the generation of voice to lung function. If lung-Qi is in equilibrium then the passage of air and the voice are normal. If lung-Qi is deficient then the voice is weak. If Wind-Cold invade the lung, so that the movement of lung-Qi becomes impeded, then the passage of air through the throat becomes coarse and the voice high-pitched, or the voice becomes hoarse or absent. This is known as “solid metal does not sound.” The hoarseness or aphonia resulting from deficiency of lung-Qi is known as “cracked metal does not sound.”

## III Spleen

The spleen is located in the middle-jiao, underneath the diaphragm. It is one of the main organs in the digestive system. Its meridians connect it to the stomach, in an interior–exterior relationship. The spleen belongs to the Earth Element.

### 1 *Physiological Functions of Spleen*

#### i Transportation and Transformation

This phrase means that the spleen has the functions of digesting food and drink, transforming them into the nutritive substances, and absorbing and distributing the essential nutrients to the entire body. In carrying out these processes the spleen must work with the stomach and the small intestine; but the spleen is the lead organ in this system. There are two main aspects to the spleen's role.

#### 1. **Transporting and transforming the essential substances of drink and food.**

The activities of digesting food and absorbing the nutritive substances are carried out jointly by several *zang* and *fu* organs. Food and drink are taken into the stomach. Following decomposition and fermentation by the spleen and the stomach, the sludge is transported into the small intestine. In the small intestine the clear is separated from the turbid, and the two are propelled down separate paths. The nutritive substances, which are in the clear portion, are absorbed and are conveyed by the spleen to the heart, the lung and the rest of the body, providing nourishment to all the organs and tissues. This entire process is the transporting and transforming function of the spleen.

#### 2. **Transporting and transforming water-Dampness.** This refers to the important function of the spleen in absorbing, distributing and excreting fluids. In the process of water metabolism and the delivery of fluids throughout the body, the lung, the spleen, the kidney, the liver and the other visceral organs are all closely in-

volved. However, the spleen has the pivotal role; and this role has two principal aspects. First, the spleen takes the absorbed water, transforms it into body fluids and delivers it to the lung. The lung and heart then distribute it throughout the body to carry out its tasks of nourishing and moistening. Second, after the various organs and tissues have extracted nutrients from the delivered fluids, the spleen delivers the waste fluids to the appropriate organs to be excreted from the body as sweat or urine.

The transporting and transforming functions mainly depend upon the actions of spleen-Qi. If spleen-Qi is abundant then the absorption, the transformation and transportation, and the delivery of nutrients all proceed normally. This results in a strong physical constitution, vigorous vitality, and enhanced resistance against diseases. Conversely, if spleen-Qi is deficient its ability to transport and transform becomes compromised, resulting in a poor appetite, loss of taste, abdominal distention, diarrhea, and other symptoms. These may lead further to malnutrition, manifested by emaciation, fatigue and lassitude (see [Fig. 3.3](#)).

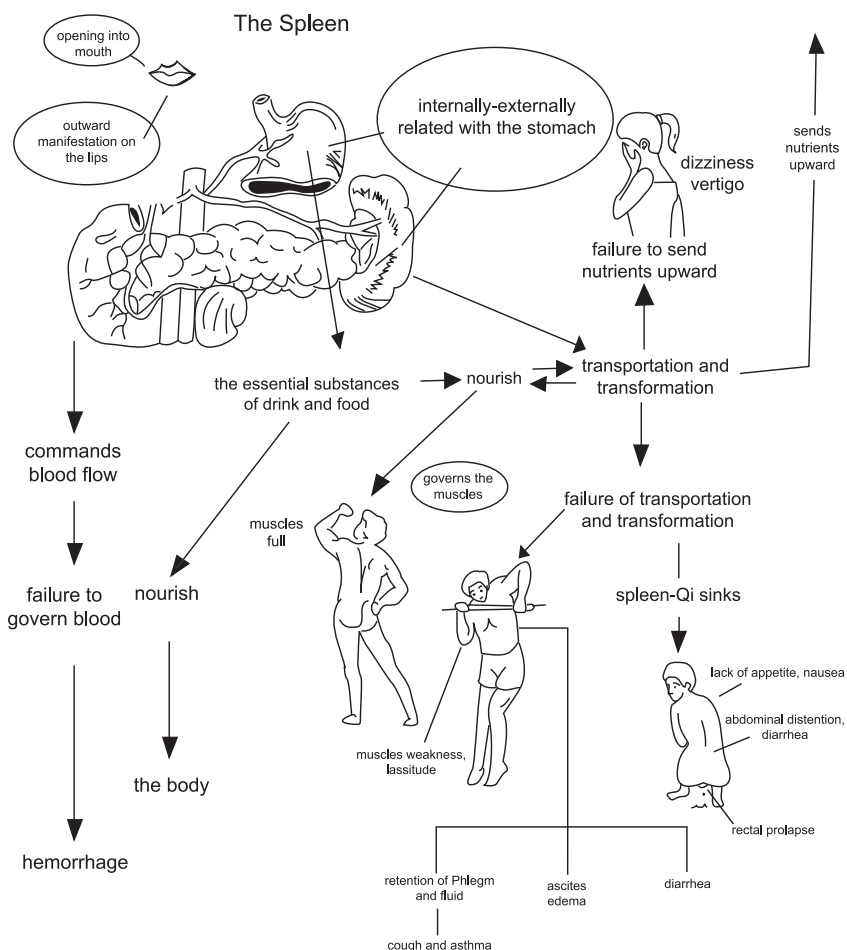
After birth, food and drink are the principal source of nutrition required by the body. They are also the material basis for the generation of Qi and blood. At the same time, the digestion of food and drink, the absorption of nutritive substances, and their distribution cannot take place without the spleen. For this reason, the spleen is said to be the “foundation of postnatal (acquisition)” and the “source for the generation of Qi and blood.”

It should be emphasized that the transforming and transporting functions of the spleen not only depend upon spleen-Qi but also are intimately linked to spleen-Yang and spleen-Yin. Spleen-Yang has the capacity to warm the body, to digest food and drink, and facilitate the production and conveyance of the nutrients and body fluid. Deficiency of spleen-Yang can lead to failure of transformation and transportation, resulting in pain with coldness in the abdomen, mucoid feces, cold limbs, even edema, and other symptoms. Spleen-Yin is the essential nutritive substance for nourishing the spleen and the stomach and for restraining spleen-Yang. Deficiency of spleen-Yin can lead to emaciation, with pallid complexion, poor appetite, a dry mouth, a dry and red tongue, constipation, and other symptoms. The mutual relationship of restraint and support between spleen-Yin and spleen-Yang is a basic requirement for the maintenance of Yin–Yang equilibrium in the spleen and the stomach.

## ii Raising of the Clear

This is a characteristic function of the spleen, and refers to both raising clear Qi upward and stabilizing the internal organs in their original locations.

Controlling the raising up of the Clear. Here, the “clear” means the nutrients that are extracted from drink and food, and raising the clear means propelling them upward and distributing them. After food and drink have been digested by the stomach, the spleen extracts the nutrients and, through its function of raising the clear, delivers them upward to the heart and the lung, and thence to the entire body.



**Fig. 3.3** The Spleen

If this function of the spleen is normal, all the internal viscera and tissues will obtain enough nutrients and function well. If it is abnormal, there may appear such symptoms as dizziness, blurred vision and fatigue. If clear-Yang fails to ascend, the clear and the turbid may remain intermixed and sink downward. This may be manifested by such symptoms as spermatorrhea, vaginal discharge, abdominal distention, and diarrhea.

Stabilizing the normal locations of the various organs. All the visceral organs have their own normal fixed locations, and this location for each organ is dependent upon the spleen's ability to raise the clear. The reason behind this is that the muscles, ligament and fasciae that hold and support the internal organs in their locations also depend upon nourishment by nutrients transported and distributed by the spleen. If spleen-Qi does not rise, but actually sinks, then the stomach, the liver, and the kidney

may all become ptotic, and the uterus and the rectum may prolapse. Clinical experience suggests that the degree of ptosis or prolapse of these organs is proportional to the degree of spleen deficiency. Thus, the function of spleen-Qi in raising the clear and the function of the spleen in transforming and transporting are inter-connected and mutually supportive under both normal and abnormal conditions.

### **iii Commanding Blood Flow**

This function indicates that the spleen participates in controlling blood and causing it to circulate only in its proper passages and not outside them. In reality this function reflects the governance of blood by spleen-Qi. Because the spleen is the source of the growth and development of Qi and blood, if spleen-Qi is abundant then the fullness of Qi and blood in the body can be assured, and Qi is able to command blood to flow within its vessels without extravasation. But if spleen-Qi is deficient it is unable to command blood. Blood can then flow outside of its vessels, leading to such manifestations as hematochezia (blood in the feces), hematuria (blood in the urine), metrorrhagia (uterine bleeding), and purpura (bleeding under the skin). Common features shared by these manifestations are longer duration of bleeding, a light color to the blood, and bleeding in the lower parts of the body. In clinical practice, these conditions are often treated by the method of “invigorating the spleen to augment Qi.”

## ***2 Relationship of Spleen to Other Organs and Tissues***

### **i Controlling Muscles and Limbs**

The intimate relationship between the muscles of the entire body and the spleen is a direct consequence of the transforming and transporting function of the spleen.

The muscles depend upon the nutrients derived from food and drink, whose delivery is directed by the spleen. When spleen-Qi is abundant, transformation and transportation are normal. Qi and blood, fluids and essence are also abundant and can be supplied to the entire body without interruption. The muscles can then develop fully and become strong and thick. If spleen-Qi is deficient, transformation and transportation are reduced. The muscles lose their nourishment and become flaccid and weak, even atrophied.

The four limbs of the body must be nourished with the essential nutrients from food and drink and transported under the control of spleen-Qi. Abundant spleen-Qi ensures adequate supply of nutrients, so that all four limbs become well developed, agile and strong. Deficiency of spleen-Qi, on the other hand, leads to inadequacy of nutrients, so that the limbs become weak with flabby muscles, or pseudohypertrophy, sometimes to the point of losing the ability to stand.

## ii Opening into Mouth; Outward Manifestation in Lips

The mouth is located at the upper end of the digestive tract and is the place of entrance for drink and food. The chief organ for receiving and digesting foodstuff is the stomach, and the chief organ for producing and transporting nutrients is the spleen; hence both the spleen and the stomach are closely connected with the mouth. If spleen-Qi is normal then appetite will be hearty and tastes normal. As the *Spirit Pivot* states: “Spleen-Qi passes through to the mouth. If the spleen is functioning harmoniously, then the mouth can taste the five kinds of flavor.” Conversely, if the spleen is abnormal, there may be impaired appetite and altered taste. If the Dampness evil encumbers the spleen, then there may be a viscous and sweet taste in the mouth. If spleen-Yin is deficient there may be dryness in the mouth and proneness to hunger.

“The spleen has its outward manifestation in the lips” signifies that the color and luster of the lips can reflect the state of the spleen’s functionality. The reason is that the spleen is the source of Qi and blood and controls the muscles, and the lips are formed of muscles. If spleen-Qi is vigorous, Qi and blood are abundant and the lips are red, moist and lustrous. But if spleen-Qi is deficient, Qi and blood are also deficient and the lips become pale and dry, or sallow.

From the foregoing description, it is clear that spleen-Qi has the leading role in the physiological activities of the spleen. Only when spleen-Qi is ample can the spleen function normally in transportation and transformation, in raising the clear, in stabilizing the locations of the internal organs, in commanding the flow of blood, and in conveying nutrients to the whole body.

## IV Liver

The liver is located underneath the diaphragm, on the right side behind the ribs. Its meridian connects it to the gallbladder, with which it forms an interior–exterior relationship. The liver is one of the most important organs in the body. Its main functions are storage of blood, regulation of the total quantity of circulating blood, regulation of the emotions, promotion of the circulation of Qi and blood, promotion of the metabolism of fluids and regulation of menses. The ancient physicians grouped these functions in two broad categories, that of storage of blood and that of conduction and facilitation.

### 1 *Physiological Functions of Liver*

#### i Storage of Blood

The liver has the capacity to store blood and to regulate the volume of circulating blood. Blood is generated from the essential nutritive substances of drink and food

transported and transformed by the spleen and the stomach. Following generation, a portion of the blood is placed in circulation to convey nourishment to the entire body and another portion is placed in storage in the liver. Thus, the liver is the principal organ for the storage of blood. It is essential that there is a reserve store in the liver should there be need for additional blood.

Under general conditions the volume of blood in circulation through the viscera, the tissue and the other organs of the body is relatively constant. But it must respond to changing requirements depending upon the body's functional state and to the influences of changes in the weather, so that it may be regulated appropriately. For example, when a person is at rest or asleep the requirements of the various organs and tissues are reduced, and a portion of the blood is removed from circulation by the liver for storage. During physical activity or when the person is under emotional upheaval, the requirements for blood are increased. The liver now releases its stored blood to enter the circulation. Because it has this function of storing blood and the ability to regulate the volume of blood in circulation, "the liver is the sea of blood."

The functional activities of all parts of the body are closely linked to the liver. Dysfunction of the liver in storing blood manifests two principal types of pathological changes. The first type is due to insufficient stores of blood, so that the amount of blood in circulation cannot meet the requirements of the body. This may give rise to dizziness, blurred vision, night blindness, numbness in the limbs, oligomenorrhea (decreased menses), and even amenorrhea (cessation of menses). The second type is due to the liver not storing unneeded blood, leading to bleeding of various types, such as hematemesis (vomiting of blood), hemoptysis (coughing of blood), epistaxis (nosebleed), metrorrhagia (heavy uterine bleeding), metrostaxis (slight uterine bleeding), etc.

## ii Conducting and Facilitating

This phrase points to the liver's ability to facilitate the movement of Qi throughout the body, so that it can carry out its actions smoothly. This particular function has a vast scope. In a narrow sense, it affects the suppleness or hardness of the liver and the level and ease of its activities. In its broader sense, it affects all the actions of Qi and the very complex metabolism throughout the body. These effects are manifested in the following aspects.

**1. Controlling the Emotional States.** The emotional states of the human being are normal responses of the brain to stimuli from the external world. CM believes that the emotional states develop on the foundation of the physiological functions of the *zang* viscera. If the liver's conducting and facilitating function is normal, then Qi will act smoothly. The mental outlook will be optimistic, the mind at ease and open, Qi and blood harmonious and the *zang* viscera in equilibrium. Conversely, if the liver's conducting and facilitating function is abnormal, Qi is impeded and leads to abnormalities of the mental state. This is manifested in one of two ways. If the liver's conducting and facilitating function is impaired,

then Qi cannot act smoothly. Emotional depression, unhappiness, moodiness, insecurity with excessive worrying, and much sighing may ensue. This is known as “stagnation of liver-Qi.” If the conducting and facilitating function is excessive, then manic excitement, pressure pain in the head, flushed face and eyes, irascibility, insomnia with much dreaming may ensue. This is known as “irrepressible liver-Fire (Yang).”

- 2. Aiding Digestion and Absorption.** The spleen and stomach are the main digestive and assimilative organs, but the conducting and facilitating function of the liver gives them assistance. This function is expressed in two main aspects. First, the liver smooths the way for Qi’s functional activity in maintaining the normal functions of the spleen and the stomach to raise the clear and lower the turbid. Second, it promotes the secretion of bile to help with the digestion and assimilation of food. Therefore, disturbance in this liver function will affect the raising and lowering function of the spleen and bile secretion by the gallbladder. If liver-Qi attacks the spleen, spleen-Qi cannot raise the clear. This may lead to such symptoms as abdominal distention and diarrhea with loose feces. If liver-Qi attacks the stomach, stomach-Qi cannot descend. This may lead to such symptoms as stomach pain, nausea, vomiting, and much belching. If the liver loses its conducting and facilitating function, causing the gallbladder to stop secreting bile, then flank pain, a bitter taste in the mouth, reduced appetite, and even jaundice may appear (see [Fig. 3.4](#)).
- 3. Promoting the Circulation of Qi and Blood.** This function of the liver directly affects the normal movement of Qi. As Qi moves normally so will blood. Loss of this liver function can impede Qi and cause blood stasis, giving rise to distention and pain in the chest, flank and breasts, cutaneous swellings, and disturbance of the menses. If this liver function is excessive, liver-Qi rises abnormally and can cause such symptoms as headache, pain and pressure in the eyes, flushed face and red eyes, hematemesis and epistaxis.
- 4. Assisting Water Metabolism.** The entire process of water metabolism, from absorption to distribution to excretion, is carried out by the coordinated actions of the spleen, the lung, the kidney and the sanjiao. The liver affects it in two important ways. The conducting and facilitating function helps to promote water metabolism. At the same time, it helps the sanjiao in smoothing the pathways for Qi and for water. Loss of this liver function can lead to impeded Qi movement and abnormal water metabolism, and in turn lead to accumulation of Phlegm or water and edema.
- 5. Regulating the Chong and Ren Meridians.** The Chong and Ren Meridians are connected with the liver Meridian of Foot-Jueyin, and are subordinate to the liver. Therefore, normality of the conducting and facilitating function of the liver ensures the regulation of their physiological functions by making the Chong Meridian ample and the Chong Meridian unobstructed. Women then have normal menstruation, and men normal ejaculation of semen. But if these functions of the liver and the two meridians are abnormal, women may have reduced or absent menses, or painful menstruation, and infertility, while men may have reduced semen or difficulty with ejaculation.

The Liver

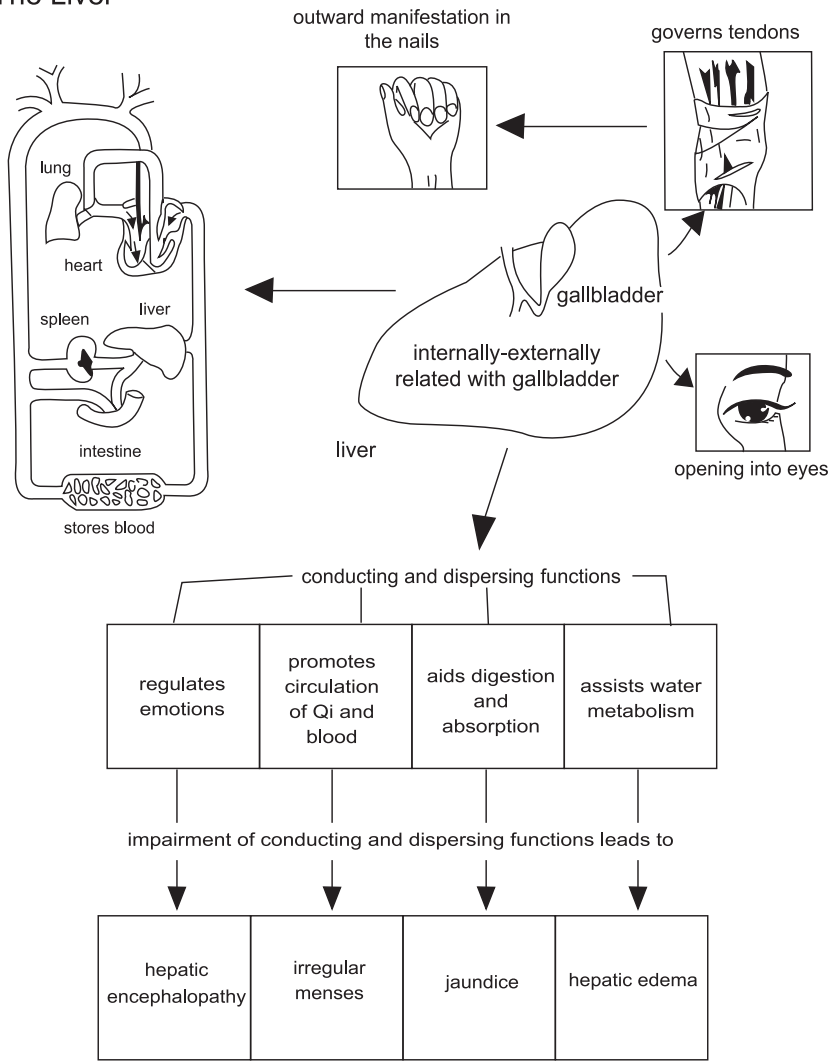


Fig. 3.4 The Liver

The liver's physiological functions are enabled by the combined actions of liver-Qi, liver-blood, liver-Yin and liver-Yang. Liver-Qi ensures the free movement of Qi, which stimulates blood circulation. Liver-blood nourishes the liver itself and the connected organs and tissues, and restrains liver-Yang preventing its excessive activity. Liver-Yin, like liver-blood, nourishes and restrains; and these two cannot be separated. Liver-Yang warms, and stands in opposition to and mutual dependence with liver-Yin. Their interaction in turn preserves their dynamic balance.

## 2 *Relationship of Liver to Other Organs and Tissues*

### i **Tendons; Outward Manifestation in Nails**

The tendons attach to the bones and gather at the joints. They link together the joints and the muscles, and they aid in controlling movement. The liver controlling the tendons means that the relaxation or contraction of all the tendons in the body is related to liver function. In CM the liver is the source of nutrients for the tendons. If liver-blood is full then the tendons are nourished. This strengthens them so they can act forcefully and the joints can flex and extend with ease. The *Plain Questions* states: “Having received blood the feet can walk. Having received blood the palms can hold. Having received blood the fingers can grasp.” If liver-blood is insufficient the tendons lose their nourishment. This can impair the limbs’ ability to flex or extend, and cause spasm in the tendons and tremors in the hands and the feet. If there is severe injury to liver-Yin and liver-blood there may be tetany in the limbs, opisthotonos and stiffness in the neck. This is known as “liver-Wind stirring in the interior.” Hence the *Plain Questions* states: “All syndromes of shaking, dizziness and vertigo belong to the liver.” It is also said: “The liver is the *zang* organ of Wind and Wood.”

The liver controls the functions of the tendons and a person’s ability to move involves the tendons. These facts have led to another saying: “The liver is the source of stamina.” Stamina refers to the capacity to resist fatigue. Since the liver stores blood and is the control over the tendons, it is also the source of the body’s capacity for motion.

The nails include both fingernails and toenails. In CM the nails are external extension of tendons; hence the saying: “The nails are the surplus of the tendons.” The status of the liver-blood is often reflected in the nails. When liver-blood is adequate the nails are well nourished and are strong, bright and lustrous. When liver-blood is insufficient the nails lose their nourishment and are pale, thin and soft, lusterless, easily deformed and brittle. Therefore, diseases affecting the nails are usually treated by methods for treating the liver.

### ii **Opening into Eyes**

The liver meridians link with the eye system. Visual acuity and eyesight depend upon nourishment by liver-blood. The *Plain Questions* states: “Having received blood the eye can see.” The *Spirit Pivot* also states: “Liver-Qi reaches the eyes. When the liver is in harmony the eyes can distinguish the five colors.” Because of the close relationship between the liver and the eyes, the physiological and pathological states of the liver can be reflected in the eyes. For example, deficiency of liver-Yin or liver-blood may lead to blurred or impaired vision, dry and scratchy eyes, and night blindness. Flaming up of liver-Fire may lead to painful inflammation of the eyes. Dampness-Heat in the liver may lead to jaundice and other symptoms.

Though the eyes are the windows for the liver, the essential Qi of all *zang* and *fu* viscera can flow into them, so that they all have connection with the eyes. These various connections have all been corroborated in clinical practice.

## V Kidney (Including the Vital Gate)

There are actually two kidneys. They are located in the posterior part of the abdomen, one on each side of the spinal column. The kidney and the urinary bladder are linked by meridians and have an interior–exterior relationship. Because the kidney houses the innate essence, it is the foundation of the Yin–Yang of the viscera and the source of life. For this reason it is also known as the “innate foundation.”

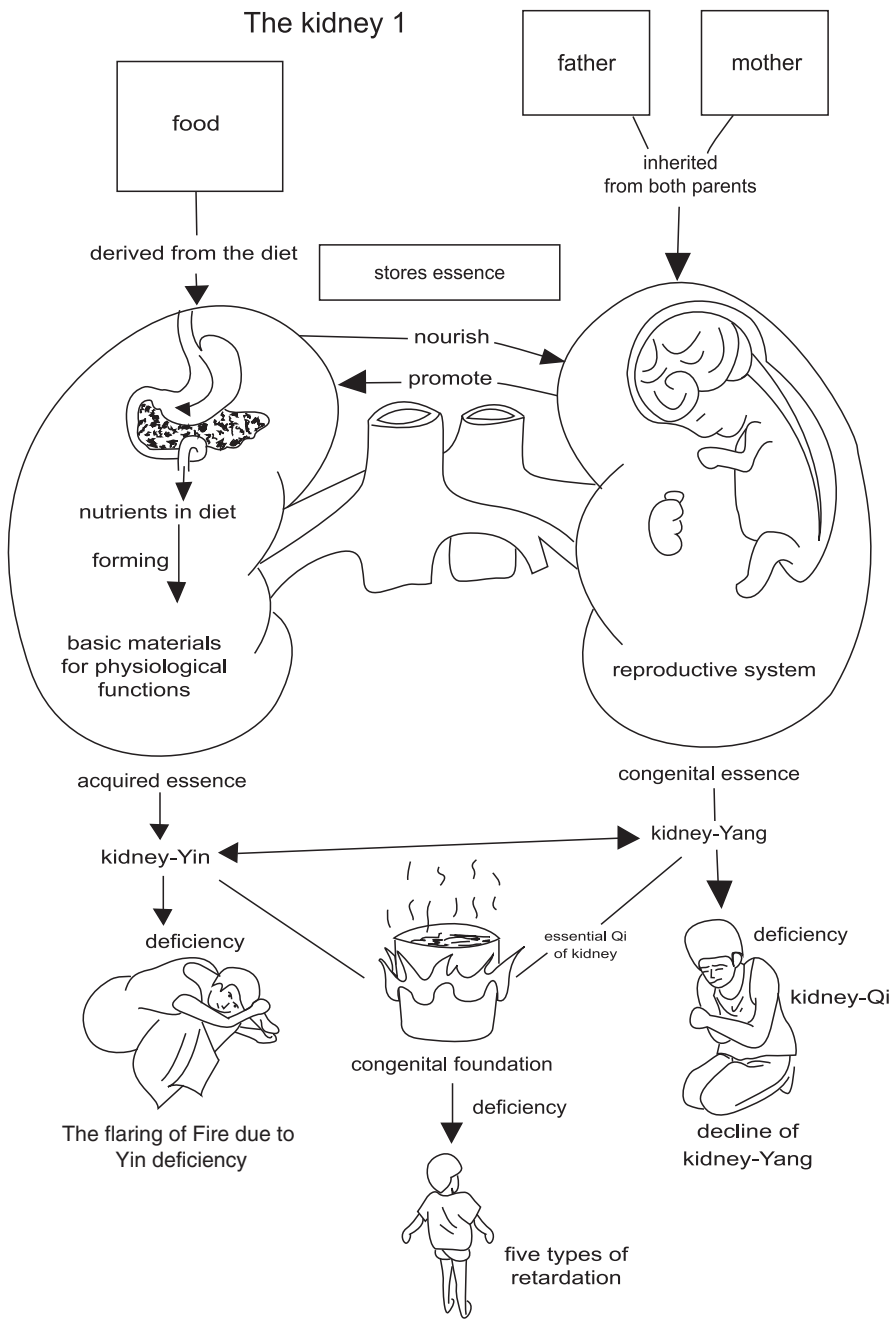
### 1 *Physiological Functions of Kidney*

#### i Storing Essence

The kidney has the physiological functions of storing and preserving essence. In CM essence has two meanings. In the broader meaning it is the basic substance which constitutes the body and maintains all its vital activities. It encompasses the body’s Qi, blood and fluids, as well as the nutritive substances extracted from the diet. In the narrower meaning it is specifically the generative essence, both that which comes from the parents and that which is engendered following maturation of the body.

Essence that is stored in the kidney has two sources. One source is the parents, who provide the generative essence, also known as “innate essence.” The other source is the diet, from which the viscera extract the essential nutritive substances and metabolically transform into essence. This essence is also known as the “acquired essence.” Although the sources of innate essence and acquired essence are different, both types of essence are stored in the kidney and are in fact inseparable. They supplement and promote each other. Innate essence relies on the continual re-supply by acquired essence in order to express fully its potential. Acquired essence relies on the assistance of innate essence in order to continue to absorb and to transform. The two types of essence are merged in the kidney and together form kidney-essence and kidney-Qi. Kidney-essence and kidney-Qi are together often referred to as the kidney’s essential Qi. Essential Qi of the kidney acts to maintain the vital activities of the body and its reproductive capacity. The main functions of kidney’s essential Qi are as follows (see [Fig. 3.5](#)).

- 1. Controlling Reproduction.** The reproductive function of the kidney has two aspects: one is sexual functionality, and the other reproductive capacity. In CM reproductive capacity is principally controlled by the state of kidney-essence.



**Fig. 3.5** The Kidney 1

Kidney-essence provides the original substance for the embryo and is the material foundation of the vital activities. The kidney's essential Qi continues to accumulate as the person grows. As it reaches fullness, the body enters into puberty and begins to produce a substance that stimulates the maturation of reproductive function. This substance, necessary for promoting the development and maturation of the gonads and for maintaining their reproductive capacity, is known as *tiangui* (there is no translation for this term). As *tiangui* reaches a certain level the body shows a very important change. A man is now able to produce sperm and a woman capable of menstruation. At this stage of maturation, during sexual intercourse the essence of the man combines with the essence of the woman, and pregnancy may result. Thereafter, as the person moves through middle age into old age, the kidney's essential Qi also moves from fullness into gradual decline and eventually fades all together. It is clear that the rise and fall of *tiangui* depends on the fullness or decline of the kidney's essential Qi; and the human body's reproductive capacity is expressed through *tiangui*.

2. **Promoting Growth and Development.** All the stages in a person's life – including birth, childhood, prime, senescence and death – are closely tied to the fullness or deficiency of the kidney's essential Qi. Beginning in childhood it rises exuberantly, enabling the body to grow and develop rapidly. By the age of seven or eight, permanent teeth replace baby teeth and hair grows longer. By the age of fourteen or fifteen, *tiangui* reaches a threshold and the reproductive organs approach maturity. Both boys and girls now possess the capacity for reproduction. By early prime, the essential Qi of the kidney is especially abundant. The body is now stout, with strong sinews, bones, and teeth, the spirit is vigorous, and the hair is shiny. In old age, because the essential Qi of the kidney now declines the body also begins to degenerate. The reproductive capacity and sexual function fade, the hair turns gray, the teeth become loose, the back becomes humped, the gait becomes unsteady, hearing becomes impaired, and the complexion becomes haggard and lusterless.

It is thus clear that the state of kidney-essence determines the body's growth and development. Insufficiency of the essential Qi of the kidney often leads to abnormal growth or development. For example, insufficiency of essential Qi of the kidney during childhood can cause delayed growth and development, including mental development. The main manifestations are "the five delays" and "the five weaknesses." The five delays are delayed standing, delayed walking, delayed tooth eruption, delayed talking, and delayed hair growth. The five weaknesses are weak hands and feet, weak head, weak neck, weak muscles, and weak mouth.

3. **Resisting Disease and Delaying Senescence.** Kidney-essence is important for the resistance against disease and the postponement of senescence. When it is ample the body has a strong constitution, great vitality, and longevity. Conversely, its deficiency causes poor growth and development, a weak constitution, premature senescence, and diminished capacity to resist disease. The result is that external evils can take advantage of this weakness and invade the body, inducing many illnesses. Therefore, physicians of every generation have emphasized the importance of strengthening and nourishing the kidney in order to prevent or

postpone senescence. Most of the herbs used to fight senescence have the ability to strengthen the kidney.

- 4. Facilitating the Production of Blood.** In CM the production of blood is closely tied to the kidney, as well as to the heart and the spleen. Kidney-essence can transform into blood, and this has given rise to two sayings: “essence and blood share their source” and “the source of blood is in the kidney.”

The full expression of the kidney’s functions relies on the cooperation of kidney-essence, kidney-Qi, kidney-Yin and kidney-Yang. The kidney stores essence, and kidney-essence transforms into kidney-Qi. If kidney-essence is ample so will kidney-Qi be ample; and conversely, if kidney-essence is deficient so will kidney-Qi be deficient. Hence the two together are often called essential Qi of the kidney.

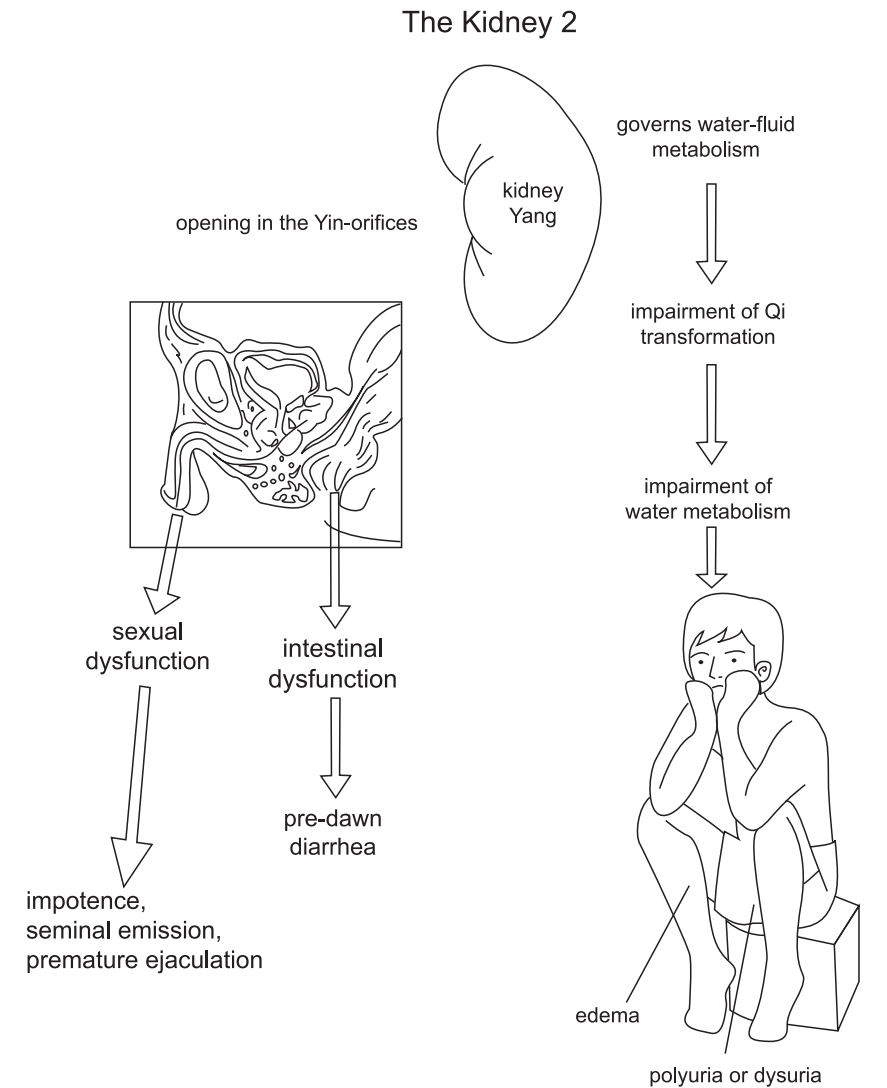
Essential Qi is the foundation of all vital activities. By the theory of Yin–Yang, essential Qi can be subdivided into kidney-Yin and kidney-Yang. Kidney-Yin, also known as primordial Yin, is the ultimate source of all Yin-fluids of the human body, and is necessary to moisten and nourish all the visceral and other organs and the many tissues. Kidney-Yang, also known as primordial Yang, is the ultimate source of all Yang-Qi of the human body, and is necessary to warm and activate all the visceral and other organs and the many tissues. Since the kidney houses Yin and Yang together, it is also known as the “house of Water and Fire.”

Under normal conditions, kidney-Yin and kidney-Yang restrict, promote and depend on each other in order to maintain the dynamic balance of Yin–Yang. Deficiency of kidney-Yin can lead to the flaring of Fire, manifested as hotness in the palms, afternoon fever, and night sweats. Males may have nocturnal semen emission, and females may have sexual dreams. Deficiency of kidney-Yang can lead to diminished capacity to warm and activate. This is manifested as coldness and pain in the lumbar region and knees, polyuria with light color, and a pale and puffy tongue. Males may have premature ejaculation or impotence, and females may have infertility because of coldness in the uterus.

The mutual opposition and mutual dependence of kidney-Yin and kidney-Yang is necessary for the dynamic equilibrium of Yin–Yang for the entire body. Because the kidney has such an important role in growth, development, reproductive capacity and postponement of senescence, it is regarded as “the innate foundation” of the human body.

## ii Governing Water–Fluid Metabolism

The kidney has the function of controlling and regulating the metabolism of water and body fluids; hence the saying: “the kidney is the water organ.” The lung, the spleen, the liver, the kidney, the sanjiao and other visceral organs all are involved in the metabolism of water and fluids. Under normal conditions, the process cannot be completed without the dispersing and lowering function of the lung, the transporting and transforming function of the spleen, the conducting and facilitating function of the liver, the water-passage dredging function of the sanjiao, as well



**Fig. 3.6** The Kidney 2

as the transforming function of the kidney. Of these organs the kidney has the most important and controlling role, and it requires the transformation function of kidney-Yang for expression (see Fig. 3.6).

The kidney’s role has three aspects. First, kidney-Yang is the motive power for water and fluid metabolism. Kidney-Yang is the root of Yang-Qi of the entire body. Although the lung, the spleen, the liver and the sanjiao all participate, it is the warming and evaporating function of the kidney that provides the basic motive power.

Second, the kidney sends the Clear to the lung for dispersal to the body and the turbid to the bladder as urine, to be excreted. This function of raising the clear and lowering the turbid is important for maintaining water balance. Third, the kidney controls the opening and closing of the urinary bladder. Opening the bladder enables it to excrete the stored urine, while closing it enables the body to retain the fluids needed by the organs and tissues. The opening and closing of the bladder depend upon the contracting action of kidney-Yin and the transforming action of kidney-Yang.

If the transforming action of the kidney-Yang fails, there may appear such symptoms as oliguria or anuria and edema. If the contracting action of kidney-Yin fails, there may appear such symptoms as polyuria, incontinence or enuresis.

### **iii Acceptance of Qi**

The kidney has the function of accepting Qi that has been inhaled by the lung. The kidney's acceptance of Qi prevents respiration from becoming shallow, thus ensuring normal exchange of gases between the body and the external environment. Although the lung controls respiration, it is the kidney that maintains its regularity. More specifically, the depth, the smoothness, and the evenness of respiratory movement can be maintained only if Qi inhaled by the lung has descended into and has been accepted by the kidney. If the kidney's capacity to accept Qi is diminished, there may appear shallow respiration, shortness of breath on light exertion, wheezing with prolonged expiration and shortened inspiration, or labored breathing. In clinical practice, chronic bronchitis, pulmonary emphysema, and lung-induced heart disease often show symptoms of "the kidney failing to accept Qi." These can be treated with good results by the method of "supporting the kidney to accept Qi." The acceptance of Qi is one aspect of the storing function of the kidney.

## ***2 Relationship of Kidney to Other Organs and Tissues***

### **i Controlling Bones; Engendering Marrow and Connecting with Brain**

The bones form the skeleton of the human body, which functions to maintain the body's shape and to protect the visceral organs. In CM the kidney stores essence and essence engenders marrow. Marrow develops within the bone cavities and promotes bone growth, which in turn stimulates growth of the body. Thus, the kidney, its essence, marrow and bones form an interconnected system. If kidney-essence is ample then marrow is richly produced. The bones in turn are well nourished and grow solid and strong. Conversely, if kidney-essence is insufficient, marrow lacks its source and the bones are poorly nourished. In children it will lead to bone dysplasia, manifesting as soft and weak bones and delayed closure of the fontanels. In adults

it may cause weakness and aches in the lumbar region and the knees, difficulty walking, and weakness or even atrophy of the lower limbs. In the elderly the bones may become brittle, fracturing easily.

There are three kinds of “marrow”: bone marrow, spinal cord and brain. All three are derived from the kidney’s essential Qi. The state of the kidney’s essential Qi therefore determines the fullness of marrow. Because the spinal cord is connected above to the brain and accumulates there, the brain is also known in CM as “the sea of marrow.” Thus, if kidney-essence is abundant, the sea of marrow will be full. The full brain in turn brings vim and vigor, clear thinking, acute hearing and vision, and good memory. Conversely, if kidney-essence is deficient, “the sea of marrow” becomes depleted. In children this may manifest as mal-development of the brain and low intelligence. In adults it may manifest as slow thought processes, dizziness, tinnitus, insomnia and forgetfulness, diminished memory, and even senile dementia.

In CM “the teeth are an extension bone.” Since the teeth and the bones share the same sources they also require nourishment by kidney essence. Abundance of kidney-essence results in firm, strong and healthy teeth. Deficient kidney-essence results in looseness or loss of teeth (see [Fig. 3.7](#)).

In recent years the effects of the kidney on bones have been corroborated by experimental study. A number of herbs have been discovered that can strengthen bones. The method of treating fractures by strengthening the kidney has contributed to more effective treatment of fractures, with faster healing.

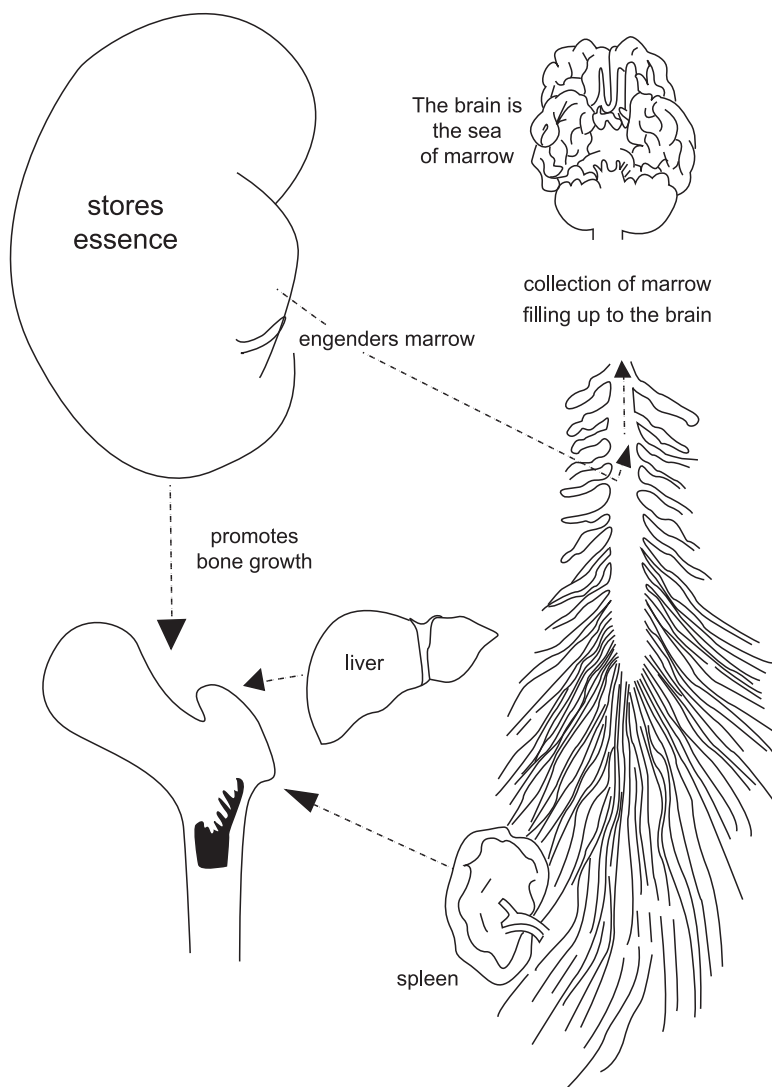
## **ii Outward Manifestation in Hair**

This means that the state of kidney-essence is reflected in the condition of hair. The growth and loss of hair and its luxuriance or withering depend not only on the state of kidney-essence, but also on nourishment by blood. This has given rise to the saying: “hair is the surplus of blood.” The reason is that the kidney stores essence, kidney-essence engenders marrow, and the blood that comes from marrow nourishes hair. In children the kidney’s essential Qi develops and hair grows longer and faster. In adults the kidney’s essential Qi flourishes and the hair is lustrous and jet-black. In the elderly the kidney’s essential Qi declines and hair turns gray and withered, and falls out easily. These are all physiological changes. In pathology, premature graying, withering or loss of hair may result from deficiency of essence and blood.

## **iii Opening in Ears and Two Yin-Orifices**

The ears are the organs for hearing. The acuity of hearing is closely related to the state of kidney-essence. Only when kidney-essence is abundant can hearing be acute. If kidney-essence is insufficient hearing may be diminished; there may even be deafness. The decline in hearing or deafness in the elderly is usually due to physiological decline of kidney-essence.

### The Kidney 3



**Fig. 3.7** The Kidney 3

There are two Yin-orifices, the anterior and the posterior. The anterior Yin-orifice is the external genitalia, which serves both urination and reproduction. The discharge of urine is under the control of the bladder, but functionally it depends on the kidney's ability to transform. If kidney-Qi is insufficient there may be disturbance of micturition, such as polyuria, oliguria or anuria, enuresis or urinary incontinence, or dribbling of urine. Disorders of the reproductive system, such as impotence, premature ejaculation or spermatorrhea, are also usually caused by defi-

ciency of the kidney's essential Qi. The posterior Yin-orifice is the anus. Defecation is mainly under the control of the large intestine and the spleen; but it also depends upon the transforming, warming and holding functions of the kidney. For example, deficiency of kidney-Yin can lead to constipation. Deficiency of kidney-Yang can lead to mucoid diarrhea. Insecurity of kidney-Qi can lead to prolonged diarrhea and rectal prolapse.

## Appendix: The Vital Gate

The term “vital gate” appeared for the first time in the *Internal Classic*. At that time, it referred to the eyes and the acupoint Jingming. It was the *Classic of Medical Problems* that for the first time spoke of the vital gate as a visceral organ. What exactly does “vital gate” mean? Is it an organ with form and substance, or a kind of function? How is it related to the kidney? Where is it located? In the literature of traditional CM there are many opinions. The main viewpoints are as follows.

1. **Right Kidney is Vital Gate.** In its 39th medical problem, the *Classic on Medical Problems* states: “The left is the kidney and the right is the vital gate. The vital gate is the house of essence, spirit and vitality. In the male it stores essence; in the female it maintains the uterus. Its Qi communicates with the kidney.”
2. **Vital Gate Resides Between Kidneys.** This viewpoint was first put forward by the Ming dynasty physician, Zhao Xianke. He held that the function of the vital gate was to provide “genuine Fire,” which controlled the Yang-Qi of the entire body. This viewpoint influenced physicians well into the Qing dynasty.
3. **Both Kidneys Are Vital Gate.** Hua Shou, a physician of the Yuan dynasty, stated: “The Qi of the vital gate communicates with the kidney. There are two names, but only one entity.” Following him, Zhang Jingyue of the Ming dynasty, asserted that Yin and Yang, and Water and Fire, both resided in the Vital Gate. Yin and Yang mutually restrain and mutually support each other, as do Water and Fire.
4. **Vital Gate Is Motive Force of Qi.** Sun Yikui of the Ming dynasty held that though the Vital Gate was located between the two kidneys it was a perpetual generative force, a pivot of vitality. Though this force between the two kidneys is the foundation of the visceral organs and the source of life, it should be thought of as Fire.

Though these opinions differ there has not been any dispute that the physiological effects of the Vital Gate remain fundamentally the same. Most importantly, the Vital Gate is the source of genuine Qi, the birthplace of the body's warmth and energy. It warms all the internal organs and tissue and promotes their functional activities. In addition, it plays a part in the reproductive and sexual functions of the human body. In clinical practice, deficiency of Fire in the Vital Gate has the same manifestation as deficiency of kidney-Yang. In treatment, herbs that strengthen Vital Gate Fire all have the ability to warm and strengthen the kidney.

In short, for these reasons the Fire of the Vital Gate is fundamentally the same as kidney-Yang. It has been called the Vital Gate principally to emphasize its importance.

## Section 3 *Fu* Viscera and Irregular Organs

### I *Fu* Viscera

There are six *fu* viscera: the gallbladder, the stomach, the small intestine, the large intestine, the urinary bladder and the sanjiao. Their main physiological functions are to receive and decompose food and drink, and to pass and discharge waste. Their main functional characteristics are to digest and transform matter but not to store it, and to function well when unobstructed. When *fu* organs are disordered the main method to restore their functions is by restoring their patency.

#### 1 *Gallbladder*

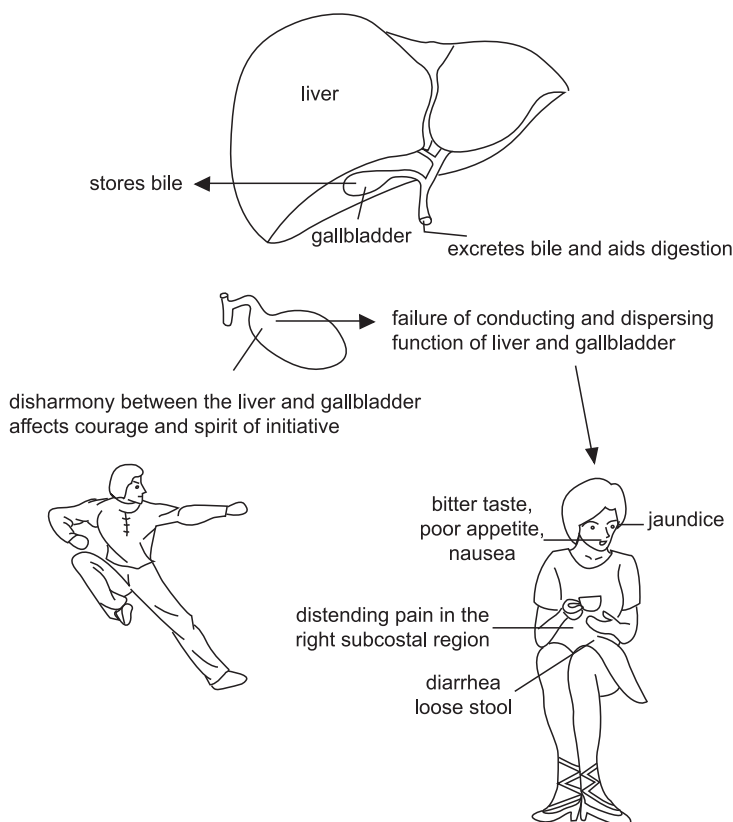
The gallbladder is a sac-shaped organ that is attached to the underside of the liver. It has two principal physiological functions.

##### i **Storing and Excreting Bile; Aiding Digestion**

The liver produces and secretes bile. The bile then flows into the gallbladder, where it is stored. Bile has a yellow-green color and is bitter in taste. It is important in promoting digestion. For this reason, bile is also called “the essential juice” and the gallbladder “the house of the essential juice.”

The storage and excretion of bile are regulated by the liver function of conducting and facilitating. If this liver function is normal the gallbladder excretes bile properly. The bile then flows into the intestinal tract, where it helps the spleen and the stomach to carry out normal digestion. Diseases in the liver will affect the production and excretion of bile, and impair digestion. Such symptoms as epigastric distention and pain, anorexia, aversion to greasy foods, abdominal distention and mucoid diarrhea may appear. Upward flow of bile can lead to a bitter taste in the mouth, nausea and vomiting. If bile overflows into the skin, there may be jaundice, with yellowing of the sclera, and dark yellow urine. If Dampness and Heat accumulate in the liver and gallbladder and cause blockage, the liver loses its function of conducting and facilitating and the gallbladder its ability to excrete bile. This may lead to the formation of bile stones (see [Fig. 3.8](#)).

## The Gallbladder



**Fig. 3.8** The Gallbladder

### ii Ability to Decide; Courage

The *Plain Questions* states: “The gallbladder is the ‘upright official’ in charge of decision-making.” This explains the relationship between the gallbladder and the person’s ability to decide. Courage is also closely linked to the gallbladder. Deficiency of gallbladder-Qi may appear as fearfulness, insomnia and dream-disturbed sleep. In this function the gallbladder is closely linked to the liver. These two organs cooperate to regulate the emotions. The normal functioning of all mental activities, such as careful thinking, judgment, determination, and decision-making, requires cooperation between the liver and the gallbladder. Thus, in clinical practice, treatment of the liver and the gallbladder is the approach to many disorders involving the emotions.

## **2 Stomach**

The stomach is located under the diaphragm. Its upper outlet, named the cardia, connects with the esophagus. Its lower outlet, named the pylorus, connects with the small intestine. The stomach has two main physiological functions.

### **i Receiving and Decomposing Drink and Food**

Food and drink enter by the mouth, pass through the esophagus and are received by the stomach. This is why the stomach is known as “the sea of food and drink.” The food and drink are reduced to chyme by the decomposing and grinding action of the stomach. The chyme is then passed on to the small intestine, where it is further digested.

Although the stomach governs reception and decomposition of food and drink, it is only with cooperation of the transforming and transporting functions of the spleen that the digestive process can be completed smoothly, and the essential substances, from which Qi, blood and fluids are derived, be extracted. Thus, the spleen and the stomach together serve as “the foundation of acquired constitution.”

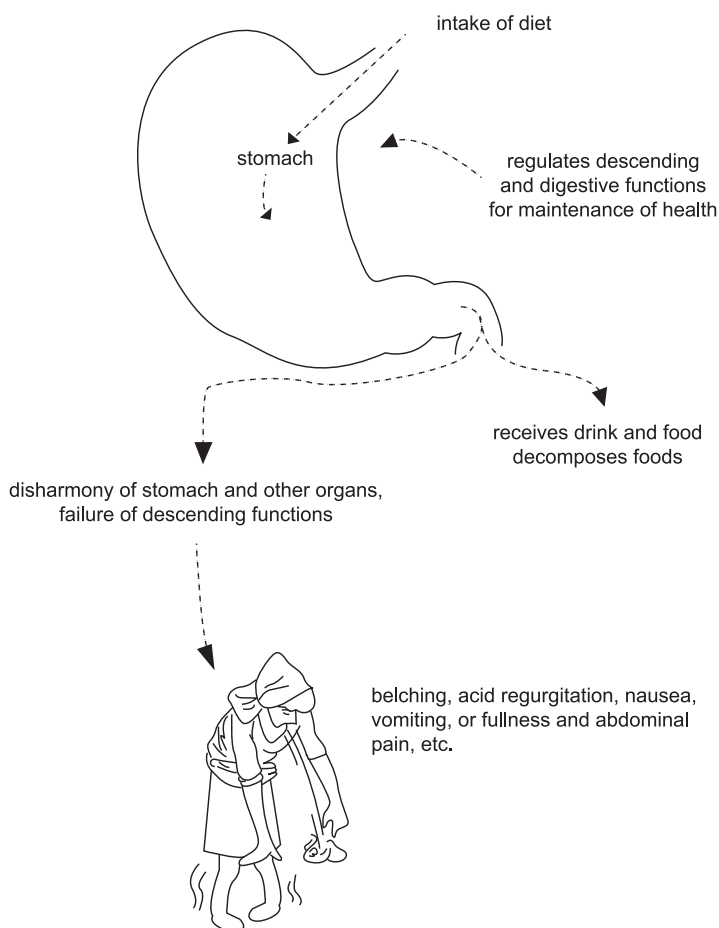
The digestive function of the stomach is carried out under the joint effort of stomach-Yin and stomach-Yang. Disturbance in this function can lead to poor appetite, distention and pain in the epigastrium, and acid regurgitation.

### **ii Descending Transportation**

The chyme that has been formed by the stomach must continue to proceed downward into the small intestine, where it undergoes further digestion and absorption. That is to say, the stomach harmonizes by descending. Only when stomach-Qi can flow downward freely can the stomach and the small intestine alternate between emptiness and fullness, and the digestive function remain normal. If stomach-Qi cannot flow downward freely there may be retention of food in the stomach, resulting in distention, fullness and pain in the abdomen, halitosis, and constipation. If stomach-Qi rises adversely there may be much eructation, nausea, vomiting and hiccups.

In CM the stomach's functions are often briefly referred to as stomach-Qi. But “stomach-Qi” has a narrower and a broader meaning. In the narrower meaning it is the physiological function of the stomach. In the broader meaning it is the entire digestive system, which includes the spleen and the sanjiao in addition to the stomach. CM attaches great importance to stomach-Qi, and believes that “stomach-Qi is the foundation of the human body.” Ampleness of stomach-Qi ensures that all five *zang* viscera are full of vigor, whereas its deficiency may lead to weakness of all five *zang* viscera. Where there is stomach-Qi there is life; where stomach-Qi is absent there is no life.

## The Stomach



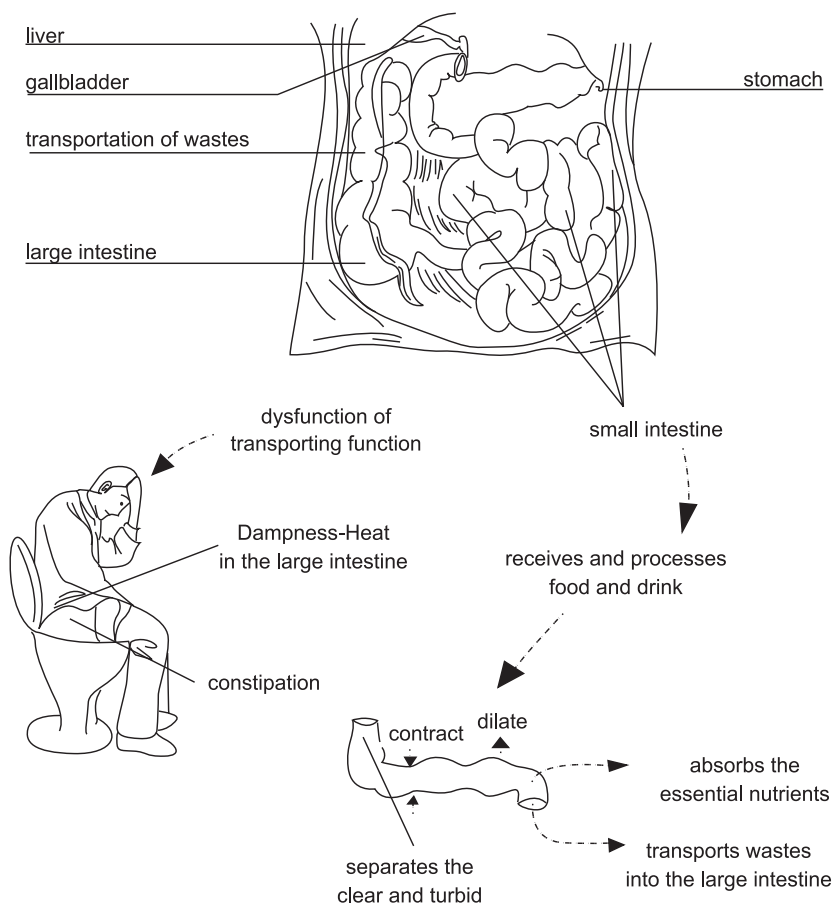
**Fig. 3.9** The Stomach

In addition, normal functioning of the spleen and stomach are reflected in the pulse. This is a pulse that is smooth, even, and forceful, and it is neither fast nor slow. It is known as the “pulse of stomach-Qi” (see [Fig. 3.9](#)).

### 3 *Small Intestine*

The small intestine, a rather long tube-like organ, is located in the abdominal cavity. Its upper end connects with the pylorus of the stomach, and its lower end

### The Small and Large Intestines



**Fig. 3.10** The Intestines

connects to the cecum, which is the beginning portion of the large intestine. The main physiological functions of the small intestine include the following two aspects (see [Fig. 3.10](#)).

#### i Reception and Absorption

The *Plain Questions* states: “The small intestine is a receiving organ; it transforms matter.” This has two meanings. First, the small intestine receives the partially digested chyme from the stomach. Second, the chyme remains in the small intestine for a while, for further digestion and transformation into the nutritive substances necessary for nourishing the entire body.

If the functions of the small intestine are abnormal, disruption of digestion and absorption may ensue. This may cause such symptoms as abdominal distention, and diarrhea with loose feces.

## ii Separating the Clear from the Turbid

The “clear” refers to the essential substances while the “turbid” refers to the waste left by digestion. The separating function of the small intestine separates the chyme into three parts and sends each part on its proper path. The essential nutritious substances are conveyed to the spleen to be distributed to the entire body. The detritus is conveyed to the large intestine. The unusable fluid is conveyed to the urinary bladder, eventually to be excreted. If this separating function is disrupted, there may be mucoid diarrhea and turbid urine.

## 4 Large Intestine

The large intestine is also located in the abdominal cavity. Its beginning portion, the cecum, is connected to the small intestine, and its lower end terminates as the anus (also known as the “Yin-orifice”).

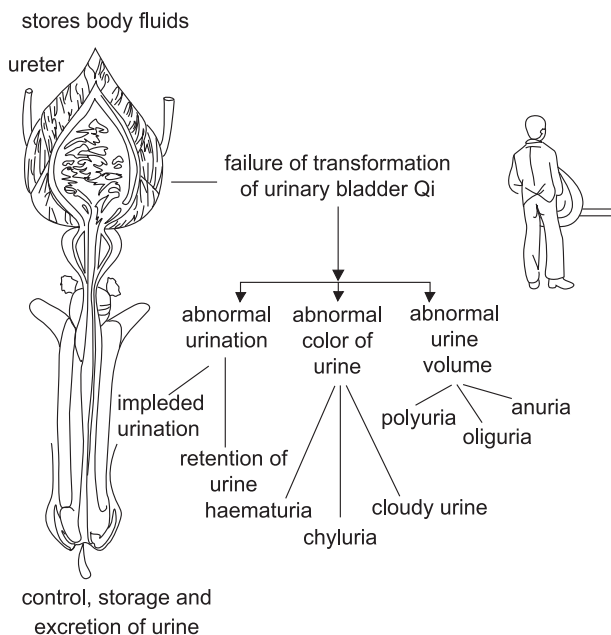
The large intestine’s important physiological function is to receive the chyme sent down from the small intestine, further absorb some fluid from it, transform the remainder into feces, and finally to discharge the feces from the body through the anus (see [Fig. 3.10](#)). Thus the *Plain Questions* states: “The large intestine is the transporting official in charge of transforming and passing the matter.” This process depends on the normal functioning of the large intestine, and also requires participation by the stomach (descending transportation), the lung (dispersion and depuration) and the kidney (Qi-transformation).

Failure of large intestinal function can lead to borborygmus, diarrhea and abdominal pain. If the large intestine absorbs too much fluid, the waste matter becomes dry and hard, resulting in constipation and a dry and red tongue. Accumulation of Dampness-Heat in the large intestine can cause stagnation of Qi and blood, resulting in diarrhea and dysentery.

## 5 Urinary Bladder

The urinary bladder is a *fu* organ located in the lower abdominal cavity. It is a hollow sac-shaped organ. Its upper end is connected to the kidneys by the ureters, and its lower end to the urethra, which opens into the external genitalia. Its main function is to store and discharge urine.

### The Urinary Bladder



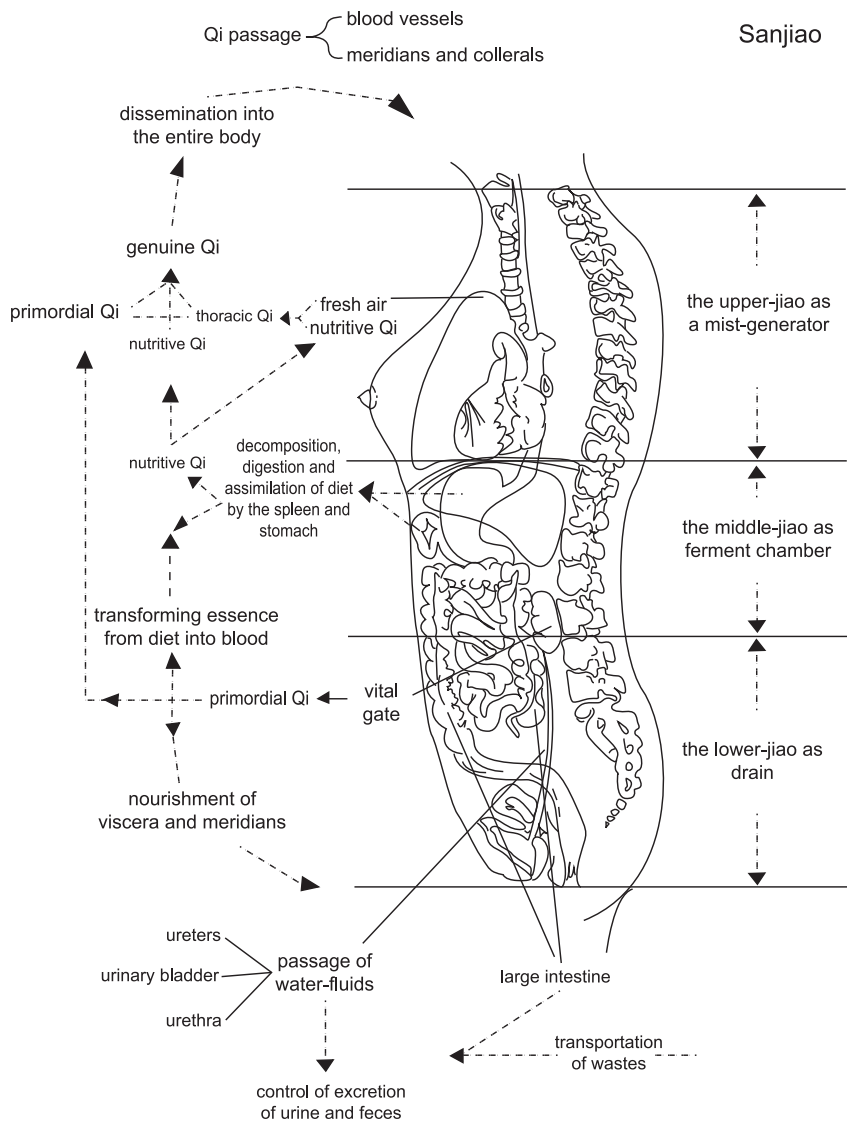
**Fig. 3.11** The Urinary Bladder

The metabolism of water is carried out by the joint actions of the lung, the spleen and the kidney. After water has been transformed into body fluids, it is distributed to the entire body to nourish all the organs and tissues. The fluid that remains after the metabolic processes is transported back to the kidney, whence it is conveyed to the urinary bladder as urine. The urine is stored in the bladder until it reaches a certain volume. At that point, by means of the transformation of kidney-Qi, it is excreted under voluntary control. Thus, the *Plain Questions* states: “The urinary bladder is the reservoir official in charge of the storage of body fluid. When bladder-Qi is transformed the urine is discharged.”

If the transformation of bladder-Qi fails, the opening and closing of the bladder become uncontrolled. If bladder control is lost, there may be very frequent urination or incontinence of urine. Clinically this is managed by treating the kidney. If Dampness-Heat obstructs the bladder there may be urinary urgency, frequency and painful urination (see Fig. 3.11).

## 6 Sanjiao

The “sanjiao” is the collective term for the upper-jiao, the middle-jiao, and the lower-jiao. These together constitute one of the six *fu* viscera. They are located in the thorax and the abdomen. There have been many explanations of what it is, and



**Fig. 3.12** The Sanjiao

even now there is no consensus regarding its form or substance. Nevertheless, the functions of the sanjiao may be summarized as follows (see [Fig. 3.12](#)).

### i Pathway for Genuine Qi

Genuine Qi is the motive power of the vital activities of the human body. It is rooted in the lower-jiao, and originates from the kidney. It is transformed from innate

essence. Genuine Qi must use the pathway of the sanjiao in order to move properly and reach the entire body, in order to carry out its action of stimulating and promoting the physiological activities of all the organs and tissues. CM believes that because the sanjiao is the thoroughfare for the movement of Qi it controls all Qi of the body, including Qi of the *zang-fu* viscera and the meridians, as well as nutritive Qi and defensive Qi.

## ii Controlling Qi Transformation

Transformation of Qi refers to the complex changes of all types of substances. Transformation of Qi takes place through the joint actions of many viscera, and among them the sanjiao has a very important part. It is the pathway for the transportation of food and drink and for the elimination of wastes. The reason is that the sanjiao is the pathway for the movement of genuine Qi, and genuine Qi is the motive power for the transformation of Qi, which stimulates and promotes the metabolism of the human body.

## iii Passage for Water-Fluids

The *Plain Questions* states: “The sanjiao is the waterway-dredging official in charge of waterways.” Thus, it has the function of maintaining the patency of the waterways and of moving fluids. The metabolism of the body fluids is the joint action of the lung, the spleen, the kidney and other organs, but the sanjiao is the essential pathway. If the sanjiao functions normally the waterways are clear and the metabolism of water and fluids proceeds smoothly. If the sanjiao is obstructed, the movement of Qi and the fluids is impeded. That may lead to such symptoms as oliguria, edema and ascites.

## iv Sectional Division of the Body

In CM “sanjiao” is also a concept used for dividing the body into three sections. Each section contains its own visceral organs. The upper-jiao contains the heart and the lung. The middle-jiao contains the spleen and the stomach. The lower-jiao contains the liver, the kidney, the large and the small intestines, the urinary bladder, the uterus, and other organs. In terms of anatomical location the liver should belong in the middle-jiao; but because in CM the liver shares the same source as the kidney and the two are closely inter-connected in physiological functions it is assigned to the lower-jiao. The functional characteristics of the three jiao are as follows.

1. **“The upper-jiao is like mist.”** The upper-jiao governs dispersion and distribution. In other words, the heart and the lung work together to convey and distribute the essential substances throughout the body to warm and nourish – like the sprinkling of mist and dew.

2. **“The middle-jiao is like ferment.”** The principal functions of the middle-jiao are those of the spleen and the stomach. These functions include the reception and digestion of food and drink, absorption of the essential substances, evaporation of the body fluid, and transformation of the essential substances into blood and other fluids – like fermenting.
3. **“The lower-jiao is like a drain.”** The principal functions of the lower-jiao are to separate the clear from the turbid and to excrete urine and feces – like wastewater pouring through a drain.

## II Irregular Organs

The brain, the marrow, the bones, the vessels, and the uterus together are known as the irregular organs. Morphologically they resemble the *fu* organs in being hollow; but they do not directly receive the essential substances from food or drink. Functionally they resemble the *zang* organs in storing essential Qi; but they do not have the complex functions that the *zang* organs do. “Irregular” means these organs differ from the *zang* and *fu* viscera.

The marrow, the bones and the vessels have been described before. Here, only the brain and the uterus are introduced.

### 1 Brain

The brain is contained in the cranial cavity, and is formed from the marrow collecting there. In CM “the brain is the sea of marrow.” Its physiological functions are as follows.

#### i Mental Activities

From very early times CM has believed that the mental activities are closely associated with the brain. The *Plain Questions* states: “The head is the house of mental activities.” The *Compendium of Materia Medica* states: “The brain is the house of primordial mind.” It is thus clear that generations of CM physicians understand the brain to be the source of mentality, consciousness, thinking and other mental activities. If brain functions are normal then vitality is full, consciousness clear, thinking quick and sharp, and memory good. Conversely, if brain functions are deficient then listlessness, dizziness, tinnitus and poor memory may result.

In the theory of visceral manifestation the physiological functions and pathological changes of the brain are all ascribed to the heart, since the heart is the chief of the *zang* organs. The emotions are further assigned severally to the five *zang* organs. Thus, the heart houses the mind and controls joy; the lung houses the soul and

controls grief; the spleen houses intention and controls brooding; the liver houses the ethereal soul and controls rage; and the kidney houses will and controls fear.

In clinical practice, many syndromes attributed to the brain are treated by methods that treat the visceral organs.

## ii Sensory Perception

The brain governs sensory perception by the body. As early as the era of the *Internal Classic* CM held that hearing, vision and other sensory perceptions were closely associated with the brain. If the sea of marrow is replete then vision, hearing, smell and speech are all normal. If the brain is diseased then these sensory functions are disrupted. There may then be blurred vision, impaired hearing, impaired smell and impaired touch perception.

## 2 Uterus

The uterus is located in the lower abdominal cavity of the female, and is the female reproductive organ. Its lower opening is connected to the vagina. Its main physiological functions are as follows.

### i Menses

The uterus is the organ that produces menses. In general, from about 14 to 49 years of age, females menstruate roughly every month; that is, “the menses come on schedule.”

In the development of the female body regulated changes take place in accordance with the rise or decline of kidney-Qi. When essential Qi of the kidney reaches a certain level the substance *tiangui* is produced. When *tiangui* reaches a certain level the two meridians Ren and Chong become patent, and regular menses result. Both Ren and Chong Meridian start from the uterus. When *tiangui* arrives Qi and blood flow smoothly through these two meridians and become abundant. They pour into the uterus, ensuring both menstruation and preparation for pregnancy. Hence there are the sayings: “the Chong Meridian is the sea of blood” and “the Ren Meridian controls the nourishment of the fetus.”

In the elderly, as the kidney’s essential Qi declines so does *tiangui*. Qi and blood that course through the Ren and Chong Meridians decrease, and the woman enters into menopause.

Clinically, dysfunction in the Ren and Chong Meridians can lead to disorders of menstruation, even amenorrhea.

## ii Gestating Fetus

Once a woman's uterus matures and her menses have become regular, she has the capacity to conceive and to give birth. The uterus must supply the nutrition for the fetus. In CM the physiological activities of the uterus is closely linked to all the visceral organs, especially the kidney, the heart, the spleen, the liver and the Ren and Chong Meridians. The reason is that the production of menses and the gestation of the fetus rely on nourishment by blood. The kidney stores essence, the heart governs blood, the liver stores blood and the spleen commands blood. Hence it is only when the *zang-fu* viscera and the Chong and Ren Meridians function well that the uterus is able to supply enough nutrients for the growth and development of the fetus.

Dysfunction of these organs and meridians can lead to irregular menses or infertility. In CM the treatment method is usually to regulate and strengthen the visceral organs and meridians mentioned above.

### Appendix: Sperm Chamber

The sperm chamber is the reproductive organ unique to the male. Its physiological function is to produce and store sperm. The *Essence of Medical Classic* states: "The uterus in the female and the sperm chamber in the male – these are the places where blood and vital energy converge and where essential Qi of Yin and Yang transforms into the fetus."

This function of the sperm chamber derives from the kidney. In CM the domain of the kidney, which governs the reproductive capacity of the body, extends to include all the reproductive organs, including the testes. Hence the testis is also known as "the external kidney" or "the outward manifestation of the kidney."

## Section 4 Relationships between the *Zang* and *Fu* Viscera

The human body is an organic whole. The actions of any one organ or tissue cannot be considered in isolation, but are an inseparable part of all the functions. The organs restrain one another, depend upon one another and support one another. For example, digestion of food and drink and absorption of essential nutritive substances from them are carried out mainly by the spleen and the stomach. But they cannot be completed without the conducting and facilitating functions of the liver, the warming by kidney-Yang, the nourishing by kidney-Yin, the separating by the small intestine and the transforming by the large intestine. For this reason, under abnormal conditions, diseases of the visceral organs also interact.

## **I Relationships among *Zang* Viscera**

The relationship among the *zang* organs is intimate. It is generally evident in the integration of the organs' characteristic functions.

### **1 *Heart and Lung***

The heart controls blood and the blood vessels, and the lung controls Qi. Qi and blood depend upon each other. Hence, the relationship between the heart and the lung can be seen in two aspects.

#### **i Qi Aids Flow of Blood**

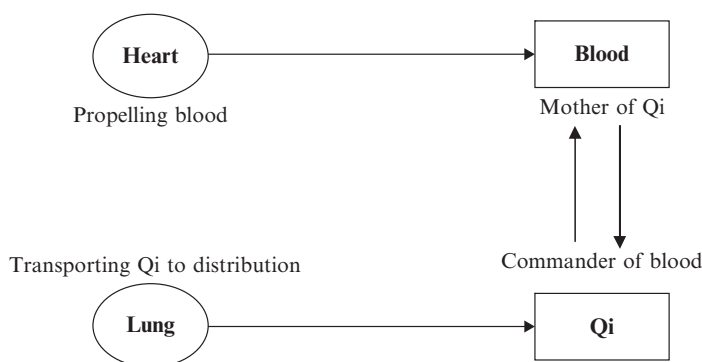
The heart controls blood vessels. The normal circulation of blood depends upon the motive power of Qi, especially of thoracic Qi. Thoracic Qi is formed when clear Qi inhaled by the lung merges with essential nutritive substances extracted from food and drink, and is stored inside the chest. Hence there are the following sayings in CM: "Qi is the commander of blood," "blood flows when Qi moves," and "if Qi becomes stagnant blood gels." If the lung is diseased then thoracic Qi becomes deficient and loses its motive power. This can lead to stasis of blood, manifested by tightness in the chest, shortness of breath, palpitation of the heart and cyanosis of the lips.

#### **ii Blood Transports Qi**

Blood serves as the carrier for Qi and the nutrients. The distribution of thoracic Qi throughout the body depends upon blood for transportation; hence, "blood is the mother of Qi" and "when blood arrives so does Qi." If the heart is diseased then lung-Qi cannot be dispersed. This can lead to tightness in the chest, shortness of breath, coughing, and labored breathing. Pulmonary heart disease and pulmonary congestion due to cardiac failure in modern medicine are concrete examples of diseases of the heart and of the lung affecting each other (see [Fig. 3.13](#)).

### **2 *Heart and Spleen***

The heart controls the blood vessels, and the spleen controls transportation and blood flow. The relationship between the heart and spleen is seen most importantly in the formation and the circulation of blood.



**Fig. 3.13** Relationship between the heart and the lung

### i Formation of Blood

The spleen's ability to transport and distribute the essential nutritive substances and its ability to generate blood both depend upon heart-Yang's warming action for completion – that is, the Fire Element generates the Earth Element. When spleen-Qi is plentiful the source of blood is abundant, the heart is well nourished and the heart's functions are normal. In pathology, deficiency of spleen-Qi can lead to deficiency of heart-blood. Deficiency of heart-blood can diminish the spleen's nourishment. This eventually results in deficiency of both the heart and the spleen, manifested by palpitation of the heart, insomnia, excessive dreaming, poor appetite and lassitude. Treatment usually involves the method of strengthening the heart and augmenting the spleen.

### ii Circulation of Blood

The circulation of blood through the vessels depends not only upon heart-Qi for propelling force, but also on the spleen in keeping the blood flowing within the vessels. In pathology, failure of the spleen in managing blood flow can bring about erratic blood circulation and excessive consumption of heart-blood. Such symptoms as nosebleed, blood in the feces, vaginal bleeding and subcutaneous bleeding can result. Deficiency of heart-Qi, and concomitant loss of propelling force, can weaken the spleen's ability to control blood flow. This can result in bleeding or blood stasis (see [Fig. 3.14](#)).

## 3 Heart and Liver

The relationship between the heart and the liver is mainly demonstrated in blood circulation and in mental and emotional activities.

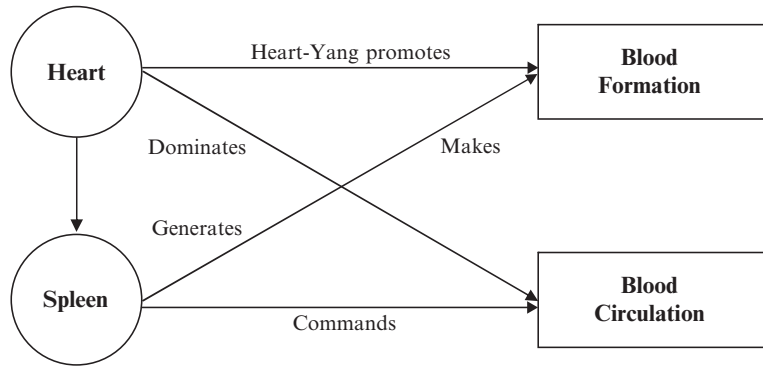


Fig. 3.14 Relationship between the heart and the spleen

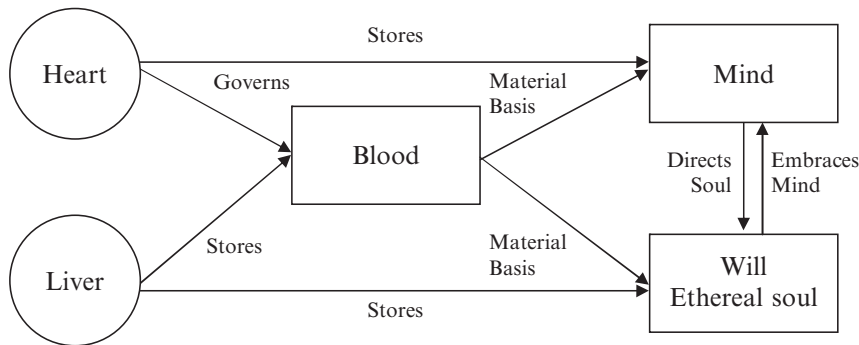


Fig. 3.15 Relationship between the heart and the liver

i Blood Circulation

The heart governs blood. The liver stores blood and regulates the amount of blood in the circulation. These two physiological actions must be integrated in order to meet the needs of the entire body for blood supply. Only if heart-blood is plentiful can the liver have blood to store, be adequately nourished and ensure a normal amount of blood in the circulation. Deficiency of heart-blood can lead to deficiency of liver-blood, and vice versa, so that deficiency of heart-blood and deficiency of liver-blood tend to develop together. The usual symptoms are tightness of the chest, palpitation of the heart, a pallid complexion, dizziness, blurred vision, withered nails, and scanty or delayed menses (see Fig. 3.15).

ii Mental and Emotional Activities

The heart houses the mind and controls mental activity, and the liver regulates the emotions. Thus the mental, conscious and thinking activities are intimately

associated with both the heart and the liver. Blood is the material basis for mental and emotional activities, and it is controlled by the heart and stored by the liver. These two organs cooperate and work in harmony to maintain a normal mental and emotional state. Deficiency of both heart-blood and liver-blood causes the mind to lose its nourishment, and such symptoms as palpitation of the heart, insomnia, and dream-disturbed sleep may appear. Loss of the conducting and facilitating functions of the liver may lead to Qi stagnation and production of endogenous Fire, which transforms fluids into Phlegm. The Phlegm-Fire can rise upward and disturb the mind, causing restlessness, insomnia, irascibility, erratic behavior and incoherent speech.

#### 4 Heart and Kidney

The heart governs Fire and is a Yang organ. The kidney governs Water and is a Yin organ. The relationship between the heart and the kidney is therefore one of harmony between Fire and Water. The heart is in a higher position and the kidney lower. In normal conditions heart-Yang descends to the kidney, where together with kidney-Yang it warms kidney-Yin, so that kidney-water does not become overproductive. Kidney-Yin ascends to the heart, where together with heart-Yin it moistens (moderates) heart-Yang, so that heart-Yang does not become excessive. This reciprocating interaction of Yin and Yang ensures that the functions of the heart and the kidney are harmonious. This is known as “the harmony between the heart and the kidney,” and “the mutual support of Water and Fire.”

Disruption of this relationship can lead to “disorder between the heart and the kidney,” manifesting as agitation, insomnia, dreams-disturbed sleep, and nocturnal emission in men or sexual dreams in women. If heart-Yang is deficient, heart-Fire cannot descend to assist kidney-Yang. Instead of flowing normally kidney-Water can then rise and attack the heart, leading to “Water-Qi insulting the heart.” The symptoms are palpitation of the heart, edema and dyspnea (see Fig. 3.16).

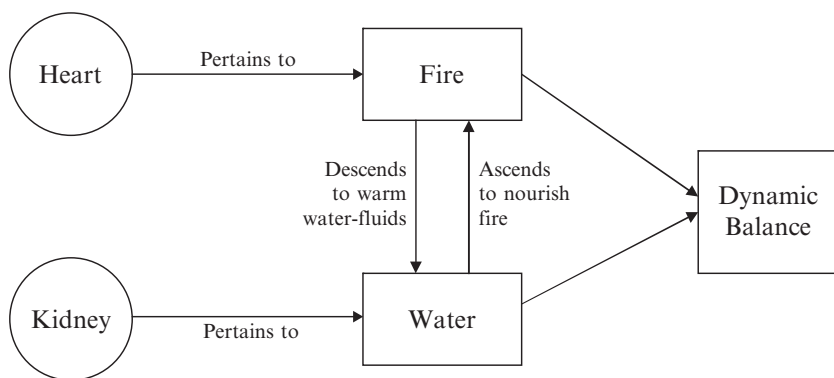


Fig. 3.16 Relationship between the heart and the kidney

## 5 *Spleen and Lung*

The relationship of the spleen to the lung mainly centers on the formation of Qi and the metabolism of water.

### i Qi Formation

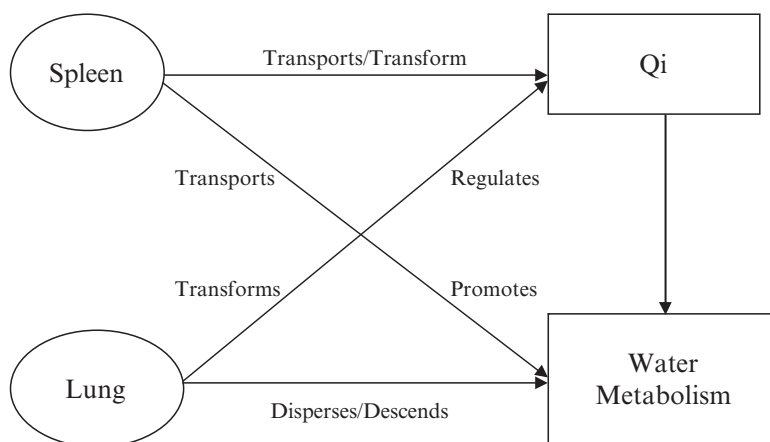
The formation of Qi, especially thoracic Qi, depends mainly upon the cooperation of the spleen and the lung. The fresh air inhaled by the lung and the food-essence derived by the spleen combine in the chest, resulting in the formation of thoracic Qi. With the help of the lung's dispersion and depuration, the spleen can perform its transformation and transportation of nutrients to the entire body. On the other hand, the spleen can ensure that the lung works normally by continually delivering food-essence upward to the lung. Thus, "the spleen is the source for forming Qi" and "the lung is the key for controlling Qi."

Deficiency of spleen-Qi can cause insufficiency of lung-Qi. Prolonged insufficiency of lung-Qi can adversely impact Qi formation and lead to deficiency of spleen-Qi. Eventually there will be deficiency of both spleen-Qi and lung-Qi. Clinically this is manifested as poor appetite, loose feces, emaciation, and debility.

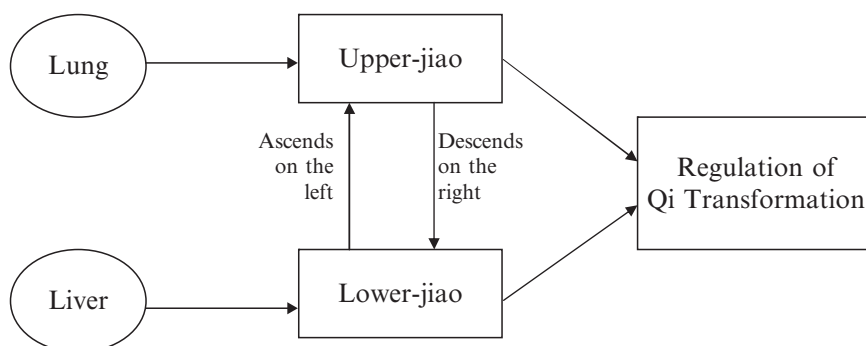
### ii Water Metabolism

The lung has the functions of dispersion and depuration and of regulating the water passages; and these functions assist the spleen's functions. The spleen transports fluids and nutritive Qi to the lung, which help the lung in its functions. Cooperation between the lung and the spleen ensures that water metabolism remains in equilibrium.

If the spleen fails in its functions of transportation and transformation, water and Dampness may accumulate. They may then gel into Phlegm, which in the lung can cause obstruction. The obstructed lung loses its functions of dispersion and depuration, and produces such symptoms as tightness in the chest and cough with much sputum. Thus, "the spleen is the source of Phlegm formation," and "the lung serves as the container of Phlegm." If the lung loses its functions of dispersion and depuration, water and Dampness may also accumulate, in this case blocking the middle-jiao. Since the spleen is one of the two main organs in the middle-jiao, its functions also become disrupted. The result is edema, lassitude, abdominal distention and loose feces (see [Fig. 3.17](#)).



**Fig. 3.17** Relationship between the spleen and the lung



**Fig. 3.18** Relationship between the lung and the liver

## 6 Lung and Liver

The relationship between the lung and the liver is demonstrated mainly in the regulation of Qi. The lung is in the upper-jiao and its Qi moves downward. The liver is in the lower-jiao and its Qi moves upward. Thus, “liver-Qi ascends on the left, whereas lung-Qi descends on the right.” Both organs must function normally for Qi to be regulated properly and for the vital activities of the body to be maintained.

If the liver is blocked, Fire is generated. Fire then moves upward along the meridians and injures lung-fluid, leading to flank pain, irascibility, and coughing up of sputum and blood. This is “Wood-Fire punishing Metal.” Conversely, prolonged disease of the lung disrupts its depuration function. The Dryness and Heat evils then move downward and cause the liver to fail in its dispersion function. This may cause coughing, subcostal pain, impatience and irascibility, headache and dizziness (see Fig. 3.18).

## 7 Lung and Kidney

The relationship between the lung and the kidney is demonstrated mainly in two aspects.

### i Respiration

The lung controls Qi and respiration, and the kidney stores Qi. These two organs work together to ensure that respiration is carried out completely (see Fig. 3.19).

When the kidney's essential Qi is vigorous the lung can send inhaled fresh air to the kidney and the kidney can receive it. Only then can respiration be even and deep. Thus, "the lung is the governor of Qi, while the kidney is the root of Qi." If the kidney fails to accept Qi, Qi will remain floating above. There may then be coughing, shortness of breath, and rapid breathing; even the slightest exertion may exacerbate the labored breathing.

### ii Water Metabolism

The lung is the upper source of water. It has the functions of dispersion and depuration and of the regulation of the water passages, so that water in the upper-jiao can descend to the kidney. The kidney is the organ that controls water metabolism. Its functions are to transform Qi and to raise the clear and send down the turbid. Thus, these two organs work together to maintain equilibrium in water metabolism. Any abnormality in either organ can affect the other. If the lung loses its ability of dispersion and depuration and its regulation of water metabolism, the kidney's functions are also disrupted; in this state there may be such symptoms as edema and oliguria. Loss of control over water by the kidney can lead to water attacking the lung; this is known as "Cold-water shooting at the lung." There may be edema, severe coughing and labored breathing.

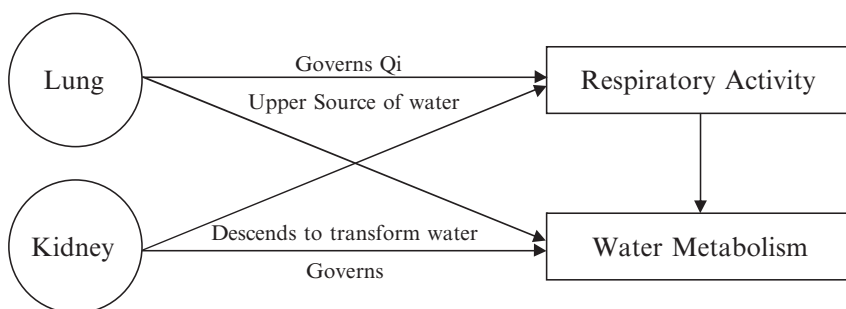


Fig. 3.19 Relationship between the lung and the kidney

## 8 *Liver and Spleen*

The relationship between the liver and the spleen is demonstrated mainly in two areas, the digestion of food and the circulation of blood (see Fig. 3.20).

### i Digestion of Food

The spleen governs transportation and transformation, and the liver governs conduction and dispersion. The normal ascending–descending of the spleen and the stomach depends upon the movement and regulation of liver-Qi. The close cooperation between the liver and the spleen ensures the proper digestion of food and drink and the absorption and distribution of the essential nutrients. If stagnant liver-Qi compromises the spleen’s ability to transport and transform, there may be chest and epigastric tightness, loss of appetite, abdominal distention, mucoid feces, and heartburn with eructation. If the spleen is deficient and fails to transport and transform, water and Dampness can accumulate and engender endogenous Heat. When Dampness-Heat overpowers the liver and the gallbladder, bile can overflow into the skin causing jaundice.

### ii Circulation of Blood

The spleen is the source of Qi and blood and their accumulation and movement depend upon the spleen’s ability to transform. If spleen-Qi is abundant then blood production is ample, and the liver has to store blood and the circulation of blood is normal. If spleen functions are impaired, the source of Qi and blood becomes inadequate, or if the spleen is unable to command blood, then there will be deficiency of liver-blood. This manifests as loss of appetite, emaciation, and oligomenorrhea or amenorrhea.

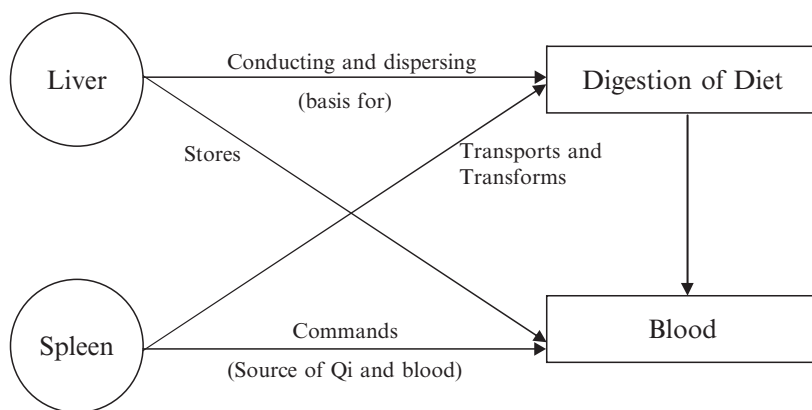


Fig. 3.20 Relationship between the liver and the spleen

## 9 Liver and Kidney

The relationship between the liver and the kidney is demonstrated mainly in two aspects: the fact that “essence and blood share a common source” and the mutual nourishment of liver-Yin and kidney-Yin.

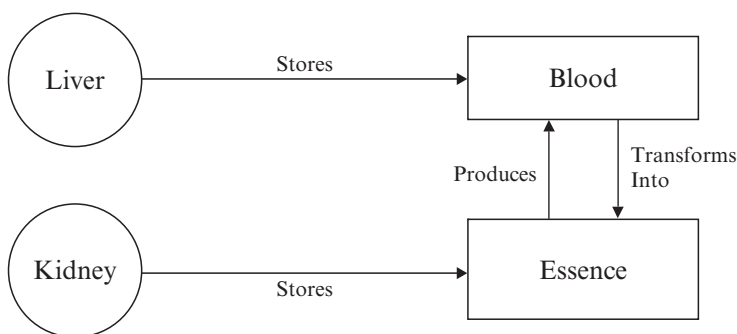
### i Common Source of Essence and Blood

The liver stores blood and the kidney stores essence. Essence can generate blood and blood can transform into essence. Liver-blood depends upon kidney-essence for nourishment; if kidney-essence is abundant then liver-blood is ample. Kidney-essence depends upon liver-blood for nourishment; if liver-blood is ample then kidney-essence is abundant. Liver-blood and kidney-essence both derive from the essential substances extracted from food and drink. Thus, “essence and blood share a common source” and similarly “the liver and the kidney share a common source.”

Deficiency of kidney-essence can lead to deficiency of liver-blood, and vice versa. In either case eventually both liver and kidney become deficient. This is manifested as emaciation and lumbar and knee aches and weakness. In males there may be impotence; in females there may be diminished or absent menses (see [Fig. 3.21](#)).

### ii Mutual Nourishment of Liver-Yin and Kidney-Yin

The kidney stores essence and belongs to the Water Element. Kidney-Yin nourishes liver-Yin and prevents excessive activity of liver-Yang. Liver-Yin also nourishes kidney-Yin. Insufficiency of kidney-Yin can lead to deficiency of liver-Yin, which in turn can give rise to excessive liver-Yang. Injury to liver-Yin can induce injury to kidney-Yin, causing deficiency of kidney-Yin. Both conditions can eventually lead to deficiency of Yin and excess of Yang. Clinically, this is seen as dizziness,



**Fig. 3.21** Relationship between the liver and the kidney

fainting, tinnitus, agitation and irascibility, lumbar and knee aches and weakness, and feverishness in the five centers. In males there is nocturnal seminal emission, and in females reduced menses.

## 10 Spleen and Kidney

The spleen is the foundation of acquired constitution and the kidney is the foundation of innate constitution. The relationship between the spleen and the kidney is demonstrated mainly in the interaction between acquired constitution and innate constitution.

Physiologically, the spleen can function well in transportation and transformation only when it is warmed by kidney-Yang. At the same time maintenance of the abundance of kidney-essence depends upon a continual supply of the essential substances transported by the spleen. This relationship is known in CM as “the innate augments the acquired, and the acquired nourishes the innate.”

In physiology the spleen and the kidney promote each other, and in pathology they affect each other. For example, when kidney-Yang is deficient and unable to warm spleen-Yang, then spleen-Yang becomes deficient. Prolonged deficiency of spleen-Yang can injure kidney-Yang. Both can lead to diseases of deficiency of spleen and kidney Yang, which is manifested as abdominal distention, cold limbs, cold-aversion, lumbar and knee aches and weakness, or pre-dawn diarrhea (see Fig. 3.22).

## II Relationships between *Zang* and *Fu* Viscera

The *zang* organs belong to Yin and are of the interior; the *fu* organs belong to Yang and are of the exterior. Thus the relationship between a *zang* organ and its corresponding *fu* organ is a relationship between Yin and Yang, interior and exterior. The

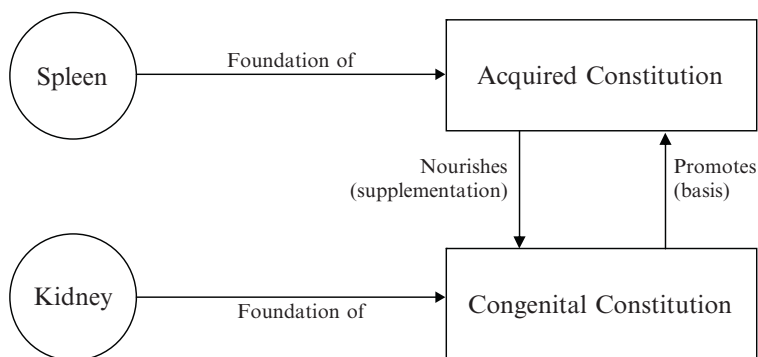
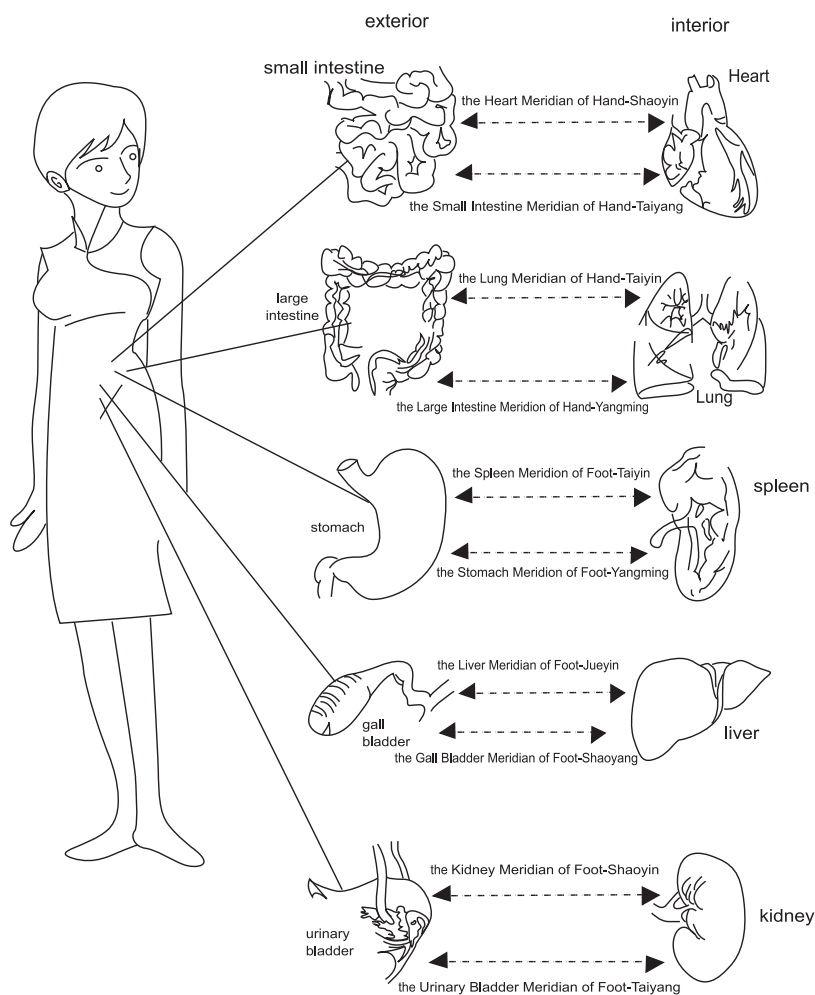


Fig. 3.22 Relationship between the spleen and the kidney



**Fig. 3.23** Interior–exterior relationships

meridians link each *zang* organ with its corresponding *fu* organ, forming dyads of interior–exterior. The members of each dyad act complementarily and cooperatively, but they also affect each other in pathology (see Fig. 3.23).

### 1 Heart and Small Intestine

The Heart Meridian pertains to the heart and connects with the small intestine, while the Small Intestine Meridian pertains to the small intestine and connects with the heart, thus uniting them in an interior–exterior dyad.

Excessive Fire of the heart can transmit by the meridians to the small intestine, causing Fire in the small intestine. This may manifest such symptoms as oliguria with dark or red urine and dysuria. Conversely, if Heat in the small intestine is excessive, it can be also transmitted through the meridians to the heart and cause Fire to flare up in the heart. This may manifest such symptoms as agitation, a red tongue and sores in the mouth.

## ***2 Lung and Large Intestine***

Meridians link the lung and the large intestine in an interior–exterior dyad. The depuration function of the lung helps to enable the large intestine’s function of transmission; and the normal functioning of the large intestine’s transmission helps depuration by lung-Qi.

If depuration by the lung fails then fluids may not descend, leading to constipation. Conversely, if the large intestine’s transmission fails then the lung’s depuration may be affected and lung Qi may fail to descend, giving rise to tightness in the chest, coughing and labored breathing. When treating diseases of the lung and the large intestine, the physician must bear in mind this relationship between them in order to enhance the therapeutic effect.

## ***3 Spleen and Stomach***

The spleen and the stomach are both located in the middle-jiao. They are linked in an interior–exterior dyad by meridians. There are three aspects to this relationship.

### **i Digestion, Transportation and Transformation**

The stomach governs the receiving and digesting of food and drink into chyme, and in so doing provides the material for the spleen to transform and transport. The spleen transforms and distributes the essential substances to the entire body, and the nutrients enable the stomach to receive and digest. These two organs’ functions must work in concert if the digestion of food and drink and the extraction and transportation of essential nutrients from them are to be accomplished. If the stomach cannot receive, the spleen cannot transform and transport; and if the spleen fails to transform and transport, the stomach cannot receive properly. Thus, pathologically they affect each other and their clinical symptoms generally also appear together, such as abdominal distention, loss of appetite, eructation and loose feces.

## ii Raising and Lowering

The spleen governs raising; it raises clear-Yang-Qi and essential substances and distributes them to the heart and the lung. Stomach-Qi governs lowering; it sends chyme down into the small intestine. If the spleen can raise and the stomach can lower, then Qi moves smoothly and ensures normal digestion. If the spleen does not raise the clear then the stomach does not lower the turbid; and vice versa. Clinically, abnormality of raising and lowering manifests as nausea, vomiting, abdominal distention and diarrhea.

## iii Dryness and Dampness

As a *zang* organ the spleen belongs to Yin. It likes dryness and dislikes dampness. As a *fu* organ the stomach belongs to Yang. It likes moistness and dislikes dryness. Only when the spleen and the stomach cooperate can dryness and dampness be adjusted and the Yin and Yang of the spleen and the stomach be balanced. Only then can the digestive functions be maintained at a high level. Invasion of the spleen by external Dampness and deficiency of spleen-Yang can both cause disruption of the functions of the spleen and the stomach. Invasion of the stomach by Dryness-Heat evils and deficiency of stomach-Yin can both cause Dryness-Heat in the interior. This too can disrupt the functions of both the spleen and the stomach.

## 4 Liver and Gallbladder

The liver is located on the right side of the lower-*jaio* and the gallbladder is attached to the liver. They are linked by meridians and form an interior–exterior dyad. Bile originates in the liver, and its storage and excretion depend upon the liver’s conducting and facilitating functions. Unimpeded excretion of bile facilitates the expression of normal conducting and facilitating functions of the liver. Disruption of the conducting and facilitating activities of the liver can impede the excretion of bile, as in obstruction by gallstones also. Stagnation of gallbladder-Qi impairs the functional activity of liver-Qi, as well as the free-flow of Qi and blood. Therefore, the liver and the gallbladder cannot be completely separated in physiology or pathology.

In clinical practice, diseases of the liver and the gallbladder frequently appear together. For example, flaring of liver and gallbladder Fire can give rise to the syndrome of subcostal pain, impatience, irascibility, a bitter taste and a dry throat. Dampness-Heat in the liver and the gallbladder can give rise to the symptoms of jaundice, a bitter taste in the mouth and flank pain.

In addition, the liver governs deliberation and the gallbladder governs decisiveness. These two work closely together to maintain normal mental activity and judgment.

## 5 *Kidney and Urinary Bladder*

The kidney and the bladder are both located in the lower-jiao. They are linked by their meridians to form an interior–exterior dyad. The kidney is a *zang* organ that governs water metabolism. The bladder is a *fu* organ that stores and excretes urine. The bladder's functions of opening and closing are dependent upon the transforming functions of kidney-Qi. If kidney-Qi is ample, the bladder's retentive power will be normal and it will open and close regularly to maintain normal urination. If kidney-Qi is deficient so that Qi transformation is abnormal, there may be dysuria, incontinence of urine, enuresis and frequent urination.

## III Relationships among *Fu* Viscera

The principal physiological function of the *fu* viscera is to transform and convey matter. Their roles in the processes of digestion of food and drink, absorption of essential substances and discharge of waste are related and complementary.

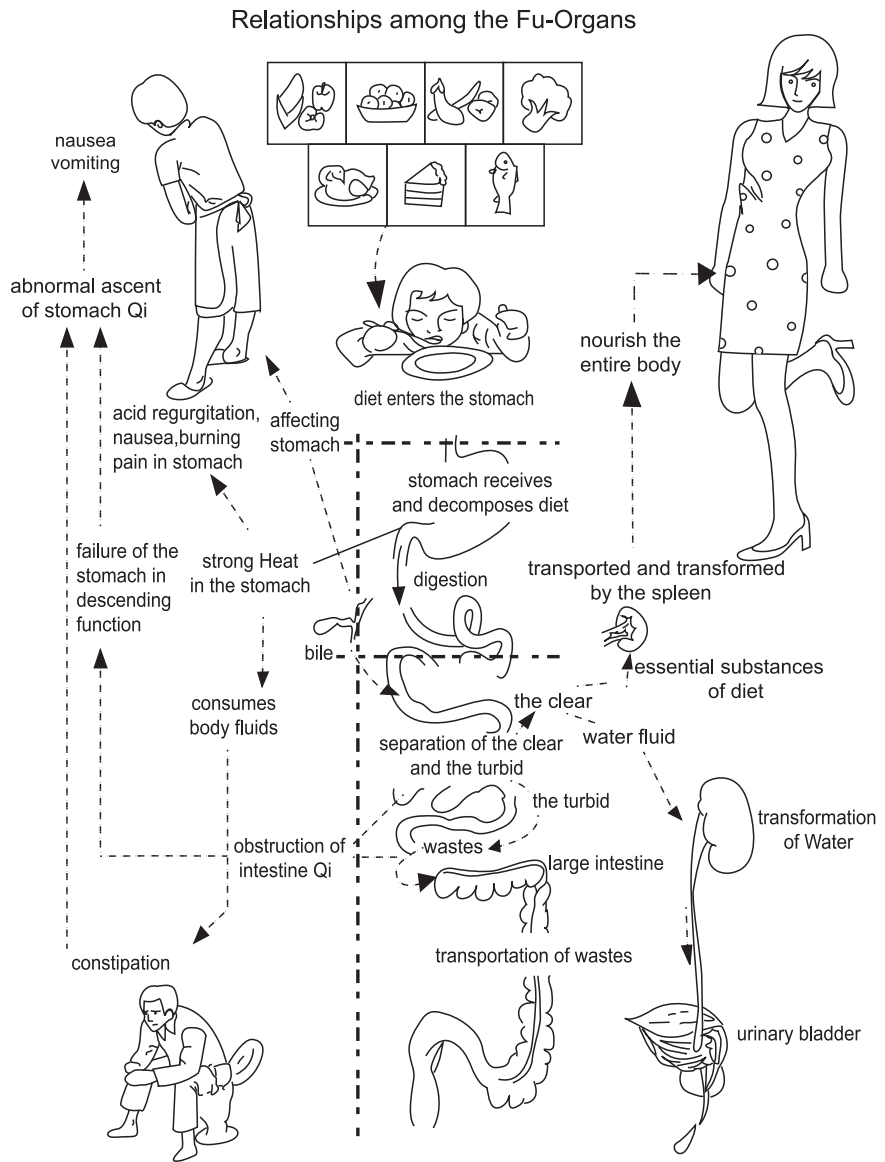
Food and drink enter the stomach. After the initial decomposition and preliminary digestion, they are transformed into chyme. The chyme is sent down to the small intestine. At the same time the gallbladder excretes bile into the small intestine to aid in digestion. After further digestion of the chyme the small intestine separates the clear from the turbid. The clear is composed of the essential substances and fluids, and the turbid the unwanted fluids and the waste products. The essential substances of the clear are transported and distributed by the spleen and other organs to nourish the entire body. Any unneeded water or fluid is conveyed to the bladder and transformed into urine by kidney-Qi. The urine is stored in the bladder until discharged by the action of kidney and bladder Qi. The turbid is passed to the large intestine, where the large intestine absorbs some more fluid and transforms the remainder into feces and conveys it further downward, eventually to be discharged. This process of digestion, absorption, and excretion is also dependent upon the liver's function of conducting and facilitating and the sanjiao's function of distributing and circulating.

In this entire process the *fu* organs must continually receive, digest, transport and excrete, so that fullness and emptiness alternate appropriately. They function well if there is no obstruction and poorly when there is. That is to say, "the six *fu* viscera require patency to function" and "in disorder of the *fu* organs removal of obstruction is the same as strengthening."

In pathological conditions the *fu* organs also affect one another. For example, if there is excessive Heat in the stomach, which consumes fluids, the large intestine may not be able to transport properly, with resulting constipation. Disruption of the transporting function of the large intestine can cause the stomach to fail in its lowering function. This can lead to abnormal rise of stomach-Qi, resulting in eructation, nausea and vomiting. If Fire blazes in the gallbladder it can injure the stomach,

resulting in vomiting of bitter fluid. Accumulation of Dampness-Heat in the spleen and stomach can injure the liver and the gallbladder, causing overflow of bile and resulting in jaundice.

In therapeutics, CM emphasizes that the method of unblocking the *fu* organs and purging the stagnated pathogenic evils is an important principle of treatment. In recent years, integrated treatment methods from both CM and Western medicine have



**Fig. 3.24** Relationships among *Fu* organs

been used in acute abdominal diseases. Such flexible application of the principle that “the six *fu* viscera require patency to function” – which favors such methods as “laxatives and purgatives to remove retained water” and “dissipation of blood stasis and elimination of accumulations” – has produced good results. Much clinical experience has shown that these methods can enhance therapeutic effect, shorten the course of treatment, rapidly resolve the symptoms of acute inflammation, and alleviate the patients’ suffering. This integrated approach has opened new prospects for treatment of acute abdominal diseases (see [Fig. 3.24](#)).

## Guidance for Study

### I Aims of Study

The theory of visceral manifestation is a core component of the theoretical system of CM. By studying this chapter students should know and master the characteristics and contents of visceral manifestation theory, and form a holistic concept of the structure and functions of the human body. It aims to set up a solid foundation for the diagnosis of illnesses, syndrome analysis and clinical practice.

### II Objectives of Study

After completing the chapter the learners will:

1. Understand the formation of the visceral manifestation theory and how it lays the foundation for clinical practice;
2. Understand the similarities and differences between the basic concepts of *zang-fu* viscera in Chinese and Western medicine;
3. Master the basic concepts of *zang-fu* viscera and the classification of the internal organs;
4. Master the main physiological functions of the *zang* organs and the significances of Qi, blood, Yin and Yang in each *zang* organ;
5. Master the main physiological functions of the *fu* viscera;
6. Master the physiological functions of the brain and the uterus;
7. Master the relationships among the *zang* viscera, between *zang* and *fu* viscera, and among the *fu* viscera;
8. Understand the relationships between the *zang* viscera and the body constituents, openings, fluids, and emotions;
9. Understand the pericardium and the Vital Gate in general.

### III Exercises for Review

1. What is the theory of visceral manifestation? How was it formed? And what are its contents?
2. How does the heart govern the blood vessels? What is the physiological relationship between “governing the blood vessels” and “housing the mind?”
3. How does the lung govern Qi? What are its dispersion and depuration functions? Give examples.
4. How does the spleen govern transportation and transformation? What does it mean to say that the spleen is “the foundation of acquired constitution” and “the source of Qi and blood?”
5. What is the conducting and dispersing functions of the liver?
6. How would you define “essence” in CM? What important functions does the kidney-essence have?
7. Why it said that the kidney is “the foundation of innate constitution?”
8. What are the relationships between the *zang* viscera and their corresponding tissues and organs?
9. Describe the physiological functions of all six *fu* viscera.
10. Which *zang* and *fu* viscera are related to blood circulation? Give examples.
11. What *zang* and *fu* viscera are related to water metabolism? Give examples.
12. What *zang* and *fu* viscera are related to the receiving, digestion, absorption and excretion of drink and food? Give examples.
13. Elaborate the physiological relationships between the organs in each of the following:
  - (a) The heart and the lung.
  - (b) The heart and the spleen.
  - (c) The heart and the liver.
  - (d) The heart and the kidney.
  - (e) The lung and the spleen.
  - (f) The lung and the liver.
  - (g) The lung and the kidney.
  - (h) The liver and the spleen.
  - (i) The liver and the kidney.
  - (j) The spleen and the kidney.
14. What is the physiological relationship between the spleen and the stomach? And how do the spleen and the stomach promote and complement each other?

## Chapter 4

# Basic Substances of Vital Activities

Essence, Qi, blood and body fluids are among the basic substances that constitute the human body. They are also the basic substances for maintaining its vital activities, and, in turn, they are the products of metabolism by the viscera. Both physiologically and pathologically there is a reciprocal causal relationship between essence, Qi, blood and body fluids, on the one hand, and the viscera, tissues and meridians, on the other. Consequently they are of major importance in guiding the clinical analysis of symptoms and therapeutics. Essence is discussed in the chapter on the visceral organs (see Volume 1, Part I, Chapter 3).

### Section 1 Qi

#### I Concept of Qi

In ancient China Qi represented a simple understanding of natural phenomena. Already during the Spring–Autumn and the Warring States eras philosophers held that Qi was the most basic substance that constituted the world and that everything in the world was produced by the action of Qi. This conception was introduced into medical theory and became a fundamental tenet for explaining the vital activities of the human body.

Today Qi is conceived as the most basic substances that constitute the human body and maintain its vital activities. In order to sustain the vital activities the body needs to extract nutritive substances from the environment to replenish Qi in the *zang* viscera. Without Qi these viscera would simply cease to function.

#### II Formation of Qi

The formation of Qi is a very involved process in which a number of *zang-fu* viscera play important parts. Qi in the human body comes from three sources: innate essential Qi is inherited from the parents; essential Qi is derived from the essence of

drink and food, transported and transformed by the spleen and stomach; and clear Qi (fresh air) is inhaled by the lung from the natural world. From the previous chapters, it is clear that the formation of Qi is not only related to innate inheritance, acquired nutrition and condition of the environment, but also closely to the kidney, the spleen, the stomach and the lung. When the functions of these internal organs are normal, Qi in the body is replete. Conversely, if they function abnormally the actions of Qi will be affected, and pathological changes, such as Qi deficiency, may ensue.

### III Physiological Actions of Qi

Qi is the basis for the maintenance of the body's vital activities. It has many different actions. In general, these actions may be grouped in the following five categories.

#### 1 *Promoting Action*

Qi belongs to Yang and is full of vigor. It can propel the circulation of blood and the distribution and metabolism of body fluids. Simultaneously, it can also stimulate the physiological functions of the *zang-fu* viscera and the meridians, so that the viscera can continue to produce new Qi, blood and body fluids to meet the needs of growth and development of the body. Any reduction in this motive force of Qi can lead to diminished function of the *zang-fu* viscera, resulting in disordered and uneven blood circulation or disordered water metabolism.

#### 2 *Warming Action*

This refers mainly to the warming and evaporative actions of Yang-Qi. The maintenance of the body's normal temperature, the physiological activities of all the organs and tissues, and the normal movement of blood and fluids all depend upon Qi's warming action.

Deficiency of Qi, especially Yang-Qi, will lead not only to such cold symptoms as cold-aversion, preference for warmth, cold limbs and low body temperature, but also to slower blood circulation and disturbances of fluid metabolism.

#### 3 *Defending Action*

This action is demonstrated mainly in two aspects. One is to defend the body surface against attack by exogenous evils. The other is to combat exogenous evils that have penetrated the body's defenses and to expel them from the body. When

the defending action of the body is strong the person is less likely to suffer from illnesses, and should the person become ill the illness is more readily treated. But if the defensive capability is weakened, the body is more susceptible to attack by pathogenic evils and any illness is more difficult to treat.

#### ***4 Stabilizing Action***

By this function Qi stabilizes the liquid systems of the body, preventing the liquids from flowing out of their vessels without cause. It is marked by the actions of keeping the blood flowing in the vessels and of controlling the amount of the secretion or excretion of sweat, urine, saliva, gastric juice, intestinal juices, and semen, so as to prevent their abnormal loss. Failure to control blood flow in the vessels may result in bleeding. Failure to control body fluids may cause spontaneous perspiration, polyuria or excessive salivation. Failure to stabilize sperm may lead to spermatorrhea or premature ejaculation.

By this function Qi also maintains the internal organs in their designated locations. Failure in this action may lead to their ptosis or prolapse.

#### ***5 Transforming Action***

This refers to the various kinds of changes in the body induced by the movement of Qi. Mostly it encompasses such actions as the metabolism of essence, blood, and body fluids, and their transformation into one another. For example, essential substances are extracted from food and drink, and these are transformed into essential Qi. Essential Qi, in turn, is transformed into Qi, blood or fluids. Metabolism of the fluids further transforms them into sweat or urine, and the wastes. These are all effects of the transforming action of Qi.

If this function is disturbed, it may affect the turnover of Qi and blood, the metabolism of body fluids, the digestion of food and drink, the absorption of essential nutrients from them, the excretion of sweat and urine, and the defecation of feces. Disturbances in these processes can result in many kinds of illnesses.

### **IV Patterns of Qi Movement**

Qi can move in many ways, but these ways can be grouped in four basic patterns: ascending, descending, exiting and entering. The *zang-fu* viscera, the meridians, the tissues and other organs are all places for Qi movement, and Qi movement is basic to the body's vital activities. Once Qi moving stops the life comes to an end.

Qi is the motive force that propels and stimulates many vital activities of the body, but its actions can be seen concretely only in the activities of the organs, tissues and meridians. For example, the lung's respiratory exhalation reflects Qi's exiting, and inhalation its entering. The lung's dispersion action reflects Qi's ascending, and depuration descending. The spleen and stomach are in charge of digestion. The spleen raises the clear, so it is healthy when its action is ascending. The stomach lowers the turbid, so it is harmonious when its action is descending.

The coordination and equilibrium between these four basic types of movements is called the "harmony of the Qi mechanism." When this harmony of Qi is disturbed the situation becomes one of "disharmony of the Qi mechanism." There are many types of disharmony of the Qi mechanism. For example, failure of the lung in dispersion, depuration and descending may lead to the sinking of spleen-Qi, adverse ascent of stomach-Qi, stagnation of liver-Qi, or disharmony between the heart and kidney.

Many examples of Qi movement and of the effects of its failure are cited in Volume 1, Part 1, Chapter 3.

## V Classification and Distribution of Qi

Owing to the complexity of Qi in the human body, there are a variety of classifications of Qi in CM. For example, it can be classified by source: innate Qi and acquired Qi. It can be classified by location: Qi of the *zang-fu* viscera and Qi of the meridians. Of *zang-fu* Qi there are heart-Qi, lung-Qi, stomach-Qi, spleen-Qi, liver-Qi, kidney-Qi, and so on.

In this section, four kinds of Qi are discussed, namely genuine Qi, thoracic Qi, nutritive Qi and defensive Qi.

### 1 Genuine Qi

Genuine Qi is also called original Qi or primordial Qi. It is the most fundamental and important Qi of the human body, and the primary motive force for the vital activities.

#### i Formation and Distribution

Genuine Qi originates from the kidney through transformation of the kidney's innate essence. It also depends upon acquired essence from drink and food for supplemental nourishment. Following formation it flows throughout the body via the *sanjiao*, in the interior to the *zang-fu* viscera and in the exterior to the muscles and skin. It has actions in all parts of the body.

## ii Physiological Actions

The principal actions of genuine Qi are to promote growth and development of the body, and to warm and stimulate the physiological activities of the viscera, the meridians, the tissues and the organs. If genuine Qi is ample then the *zang-fu* viscera, the meridians and the organs are vigorous in their activities, and the body has a strong constitution and is relatively free of disease. If genuine Qi is deficient – because of insufficient innate endowment, inadequate postnatal acquisition, or damage by prolonged illness – many illnesses may ensue.

## 2 Thoracic Qi

### i Formation and Distribution

Thoracic Qi is a mixture of fresh air inhaled by the lung and essential Qi transformed by the spleen and stomach from the essence of drink and food. Following formation it accumulates in the chest; hence the chest is called “the upper sea of Qi.” After being acted upon by the lung (dispersion) it moves up to the throat and sideways into the heart meridian. After being acted upon by the lung (depuration) it moves to and is stored in *Dantian*, which is located in the pelvic abdomen about an inch and a half below the umbilicus. *Dantian* is the starting point of the Ren, Du and Chong Meridians and the confluence of the entire body’s Qi; hence it is also known as “the (lower) sea of Qi.” From *Dantian* it further enters, via the acupoint Qijie (ST-30), the Stomach Meridian of Foot Yangming and into the feet (see Volume 2, Part I, Chapter 1 and 3). The abundance or deficiency of thoracic Qi directly affects the functions of the lung, the spleen and the stomach.

### ii Physiological Actions

Thoracic Qi has two main actions. One is to facilitate respiration by coursing through the respiratory tract. This also relates to the strength of the voice and of speech. The another is to course through the heart meridian to energize the beating of the heart and regulate the heart rate and rhythm.

In clinical practice, the physician generally assesses the ampleness of thoracic Qi by palpating the pulse of the apex of the heart, just below the left nipple.

## 3 Nutritive Qi

Nutritive Qi is that Qi which flows with blood in the vessels. It is closely related to blood; indeed, though conceptually they can be distinguished they are inseparable

in reality. Hence, they are often referred to as “nutritive blood.” Because it belongs to Yin, it is also called “nutritive Yin.”

In some respects, nutritive Qi stands in opposition to defensive Qi.

### **i Formation and Distribution**

Nutritive Qi derives mainly from essential Qi that is transformed from food and drink by the spleen and stomach. It resides in the blood vessels and is an important component of blood, and it circulates throughout the body via the meridians.

### **ii Physiological Actions**

Aside from becoming a component of blood the principal function of nutritive Qi is to nourish the body. It supplies the nutrients necessary for the *zang-fu* viscera, the meridians and other organs and tissues, to function normally.

## **4 Defensive Qi**

Unlike nutritive Qi, defensive Qi flows outside the vessels. Because it belongs to Yang, it is also known as “defensive Yang.”

Thus, it stands in opposition to nutritive Qi.

### **i Formation and Distribution**

Like nutritive Qi, defensive Qi also derives mainly from essential Qi that is transformed from food and drink by the spleen and stomach. Innate Qi in the kidney plays an activating role in its formation.

Defensive Qi is characterized by vigor, smooth and fast flow, and great power. It is not confined to the vessels but flows throughout the body, especially the skin and the flesh. It is conveyed upward by the spleen and dispersed by the lung.

### **ii Physiological Actions**

Defensive Qi has three actions. One, it guards the body surface against attack by exogenous pathogenic evils. Two, it warms and nourishes the *zang-fu* viscera, muscles, skin and hair, and other tissues. Three, it controls the opening and closing of the orifices and pores and the excretion of sweat, thereby maintaining a stable body temperature.

### iii Comparison with Nutritive Qi

Both nutritive Qi and defensive Qi derive mainly from essential Qi that is transformed from food and drink by the spleen and stomach. However, nutritive Qi courses in the vessels whereas defensive Qi courses outside them. Nutritive Qi is Yin whereas defensive Qi is Yang. It is only when these two work together harmoniously that they can both act normally.

## 5 Summary

[Table 4.1](#) provides a summary of these four types of Qi.

## Section 2 Blood

### I Basic Concept of Blood

Blood is a red liquid laden with rich nutrients and flowing in the vessels. It is one of the basic substances that constitute the body and maintain its vital activities. In order to carry out its normal actions it has to flow within the vessels. If blood circulation is impeded or there is bleeding from the vessels, its normal actions will be impaired and blood insufficiency can become a cause of disease.

## II Formation of Blood

Blood originates from two sources: essence of drink and food, and kidney-essence.

### 1 Food Essence

Blood derives from nutritive Qi and body fluids. These are both generated from the essential substances that principally the spleen and stomach extract from drink and food after digesting them. In that sense, the spleen and the stomach are sources of blood. Prolonged inappropriate diet or impairment of stomach and spleen functions can lead to blood deficiency.

**Table 4.1** Comparison of genuine Qi, thoracic Qi, nutritive Qi and defensive Qi

Classification of Qi	Common Point	Formation	Distribution	Actions	Feature
Genuine Qi	Food essence as their respective composition	Derived from innate Qi	Throughout the body by <i>sanjiao</i>	Promotes growth and development	The primary motive force for vital activities
		Supplemented by acquired Qi		Stimulates functions of <i>zang-fu</i> viscera and meridians	
Thoracic Qi		Combination of essence from food and fresh air	Upward to the throat, running through the heart and lung, going own to the <i>Dantian</i> , pouring into the Stomach Meridian	Promotes lung respiration, energizes the heartbeat, regulates heart rate and rhythm	Its state can be assessed by the pulsation of the apex of the heart
Nutritive Qi	Derived from essence of drink and food	Derived from essential Qi of food and drink	Circulates within blood vessels	Nourishes the whole body	Cream and softness
Defensive Qi			Circulates outside blood vessels	Protects and warms body, maintains body temperature	Vigorous, smooth, strong, rapid flow

## 2 *Kidney-Essence*

Essence stored in the kidney generates bone marrow, and marrow in turn is transformed into blood. In CM, essence and blood can be transformed into each other. In general, if kidney-essence is ample the liver has its nourishment and blood has its replenishment. If liver-blood is ample the kidney has its store and essence has its supply. Thus, it is said: “Essence and blood have a common source.”

## III Physiological Actions

Blood flows in the blood vessels. In the interior it reaches the *zang-fu* viscera, in the exterior the skin, muscles, tendons and bones. It unceasingly nourishes and moistens the organs and tissues in the entire body, thereby maintaining their normal activities. This physiological state is reflected in a rosy and lustrous complexion, well-developed and strong muscles, well-moistened skin and hair with sheen, and keen perception and agile movement. If blood is deficient there may be dizziness, blurred vision, lusterless complexion, dry skin and hair, and numbness of the limbs.

Blood is also the material basis for mental activities. If blood and Qi are both abundant and smoothly flowing then the mind is sharp, perception keen and movement nimble. Abnormal circulation due to any cause – deficiency of blood, Heat in the blood, or abnormal flow patterns – can lead to mental disorder. In mild cases there may be listlessness, insomnia, dream-disturbed sleep, and restlessness. In severe cases there may be confusion, dementia, delirium and coma.

## IV Blood Circulation

Blood circulates incessantly in the vessels throughout the body to supply nourishment to all the organs and tissues. Normal circulation of blood requires coordination and balance circulation. The lung controls the entire body's Qi and is the convergence of all the vessels; it assists the heart in promoting circulation. The spleen commands the blood flowing within the vessels and prevents extravasation. The liver stores blood and regulates the volume of blood in circulation. It also helps to keep blood flowing smoothly.

It can be seen that the circulation of blood is accomplished jointly by the physiological actions of the heart, the lung, the spleen and the liver. If the function of any of these organs is impaired, blood circulation may be affected. Such abnormalities as hemorrhage, poor circulation or blood stasis may result. In addition, Cold or Heat in the blood can directly influence the rate of blood circulation (Fig. 4.1).

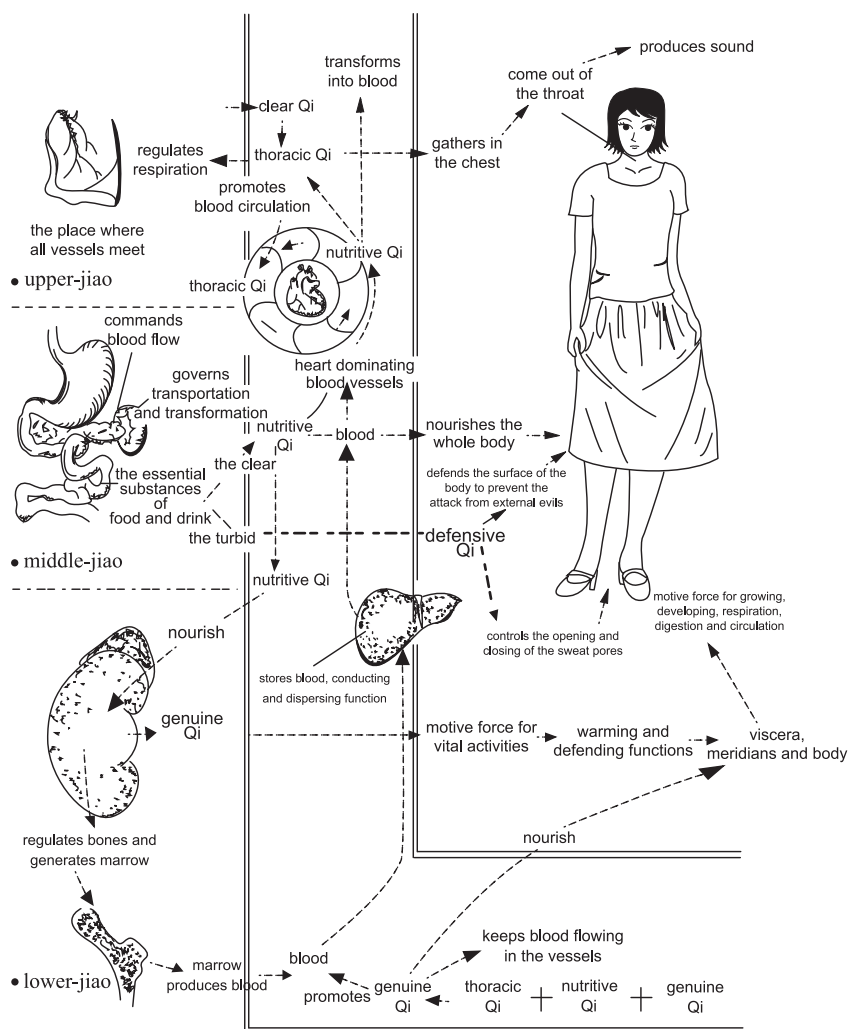


Fig. 4.1 Qi, blood and the Sanjiao

## Section 3 Body Fluids

### I Basic Concept of Body Fluids

“Body fluids” is a general term for all the normal fluids in the body. It includes the various kinds of fluids existing in all the organs and tissues as well as the normal liquid secretions, including gastric juice, intestinal juice, nasal discharge, saliva and tears. Like Qi and blood, body fluids are one of the basic substances constituting the human body.

CM distinguishes two general varieties of body fluids: *jin* and *ye*. These differ in their characteristics, actions and distribution. In general, the *jin* type of fluids is clearer and thinner, moves more freely and is principally distributed through the superficies, including the skin, the muscles and the orifices. It also enters the blood vessels readily and has the actions of nourishing and moistening. The *ye* type of fluids is more viscous and does not move as freely. It permeates the bones and joints, the visceral organs, the brain and the marrow, where it acts to moisten these structures. Each of these two types of fluids readily transforms into the other; hence they are generally referred to together as *jin-ye*, that is, body fluids.

In clinical contexts concerning “body fluids,” it is usually clear which type of fluid, *jin* or *ye* or both, is under consideration.

## II Formation, Distribution and Excretion of Body Fluids

### 1 Formation of Body Fluids

Body fluids derive from drink and food, through digestion by the stomach, separation of the clear from the turbid by the small intestine and transformation by the spleen. Thus, the abundance and adequacy of body fluids is closely tied to the physiological actions of these viscera.

### 2 Distribution and Excretion of Body Fluids

The distribution of body fluids is accomplished mainly through the joint action of the spleen (transportation and transformation), the lung (dispersion and depuration), the kidney (transformation) and the sanjiao (regulation of waterways). Following transformation by the spleen fluid is first conveyed upward to the lung, which then distributes it. Part of the fluid is delivered to the body surface to moisten it. Following its further metabolism the pores secrete the surplus as sweat. Another part is delivered downward, following depuration by the lung, to all the organs and tissues to nourish and moisten them. A portion is conveyed by the sanjiao to the bladder, where by the transforming action of the kidney its essential part is further distributed to the entire body and the residual part becomes urine to be discharged.

Other viscera also affect the distribution of body fluids. The liver's conducting and facilitating action enhances the distribution of body fluids. The sanjiao acts to keep its flow unimpeded. The large intestine partially absorbs the water from the wastes of food and drink for reutilization.

In summary, the metabolism of body fluids depends upon the functional coordination and balance of many viscera. Of them, the lung, the spleen and the kidney

play the main roles, and the action of kidney-Yang provides the motive power for the whole metabolic process. Dysfunction of any of these three organs can lead to disturbance in the metabolism of body fluids and can result in illnesses of stagnation and retention of water (Fig. 4.2).

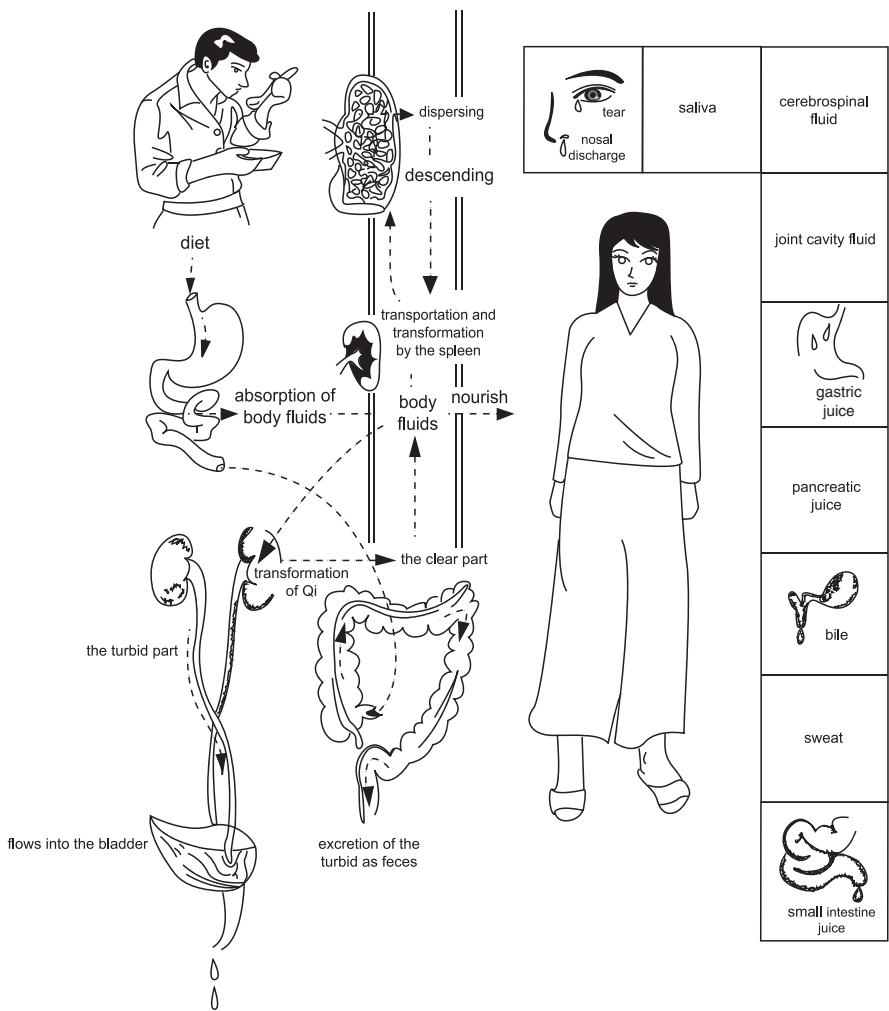


Fig. 4.2 Body fluids

### **III Physiological Actions of Body Fluids**

#### ***1 Moistening–Nourishing Action***

The fluid distributed to the body surface moistens and nourishes the skin and hair, the muscles, the eyes, the nose, the mouth and others. The fluid transported to the internal organs, the bones and marrow, the spinal cord and the brain nourishes and moistens these parts, enabling them to express their many physiological functions fully.

#### ***2 Component of Blood***

Within the structure of the human body the fluids continually enter the blood vessels by means of minute collateral vessels. Thus, body fluids are a basic component of blood. At the same time, through the confluence of fluids both from outside and from within the vessels they adjust the thickness and the volume of the blood.

## **Section 4 Relationship Among Qi, Blood and Body Fluids**

### **I Relationship between Qi and Blood**

Qi belongs to Yang and has a warming action, while blood belongs to Yin and has a nourishing action. The relationship between them can be concisely summarized as “Qi is the commander of blood” and “blood is the mother of Qi.”

#### ***1 Actions of Qi on Blood***

The actions of Qi on blood are centered mainly on three aspects, as follows.

##### **i Promoting Blood Production**

Qi is very important in the process of blood formation. Both nutritive Qi and body fluids are principal components of blood. From digestion of drink and food and extraction of essence from them, to transformation of this essence into nutritive Qi and fluids, to further transformation of nutritive Qi and fluids to blood – every step depends upon Qi and its movement and transformation. This is the reason for saying that Qi can generate blood. If Qi is abundant its ability to generate blood is

strong. If it is deficient its ability to generate blood is weak; and this state can lead to blood deficiency. Hence, clinical treatment of blood deficiency often includes augmenting Qi.

## **ii Powering Blood Circulation**

The circulation of blood depends upon Qi. Most importantly, heart-Qi provides motive force, lung-Qi provides dispersion and depuration, and liver-Qi provides conduction and facilitation. If Qi moves freely so does blood. If Qi stagnation or deficiency impedes its movement then blood flow is impeded by stasis. This is known as “blood stasis due to Qi deficiency,” or “Qi stagnation leading to blood stasis.” If Qi movement becomes erratic then blood circulation follows the ascending, descending, entering or exiting of Qi and shows erratic behavior as well. For example, if Qi ascends inappropriately blood also rises inappropriately, producing such symptoms as flushed complexion, inflamed eyes, headache and even bleeding. If Qi descends inappropriately blood also sinks, producing abdominal distention with rigidity or melena (black, tarry feces) and metrorrhagia (uterine bleeding).

## **iii Stabilizing Blood Flow**

For blood to circulate in its vessels without extravasation the stabilizing effect of Qi is indispensable. If Qi fails in this stabilizing action a variety of bleeding disorders can arise. In clinical therapeutics these are usually treated by invigorating Qi so that its stabilizing action can conduct blood back into the vessels, thereby stopping the bleeding.

## **2 Actions of Blood on Qi**

Blood is the carrier for Qi and conveys it to the entire body. At the same time, blood continually supplies the nutrients Qi needs to carry out its activities. This is known as “blood is the mother of Qi.” Because Qi is very active and can easily escape it must attach to blood or fluids in order to remain inside the body. When blood is deficient or massive blood loss occurs, Qi may lose this attachment and may scatter. This is known as “Qi collapsing following massive bleeding.”

# **II Relationship between Qi and Body Fluids**

## **1 Actions of Qi on Body Fluids**

The actions of Qi on body fluids are quite similar to those of Qi on blood.

### **i Promoting Fluid Production**

The movement of Qi provides the generative power for the production of fluids. Body fluids derive from essential Qi of drink and food transformed by the spleen and the stomach. Their formation and distribution are closely related to the spleen, the stomach and the small intestine. If Qi of the involved *zang-fu* viscera is plentiful, body fluids will be plentiful. Conversely, they will be insufficient.

### **ii Powering Fluid Movement**

The distribution and excretion of body fluids depend on Qi's movements of ascending, descending, exiting and entering. The metabolism and distribution of body fluids and the excretion of sweat and urine all depend upon the coordinated actions of the lung, the spleen, the kidney and other organs. If Qi moves so do body fluids. If the ascending, descending, entering or exiting of Qi is impeded then the distribution or excretion of fluids is also disturbed. This may lead to water retention, Phlegm accumulation, or Dampness obstruction that result from the stagnation of water.

### **iii Stabilizing Fluid Movement**

Qi regulates and controls the movement and excretion of fluids, and prevents their excessive loss. For example, defensive Qi controls the opening and closing of pores and helps to prevent damage to body fluids from excessive sweating. Kidney-Qi causes the fluid stored in the bladder to be transformed by metabolism into urine, and its discharge.

Deficiency of Qi can lead to spontaneous sweating. Deficiency of kidney-Qi can lead to frequent urination, polyuria, enuresis and incontinence of urine.

## ***2 Action of Body Fluids on Qi***

Like blood, body fluids are a carrier for Qi, and Qi must be attached to fluid (or blood) to act. If body fluids are depleted – for example, by diaphoresis, polyuria, vomiting or diarrhea – Qi loses this attachment and may scatter. This gives rise to “Qi collapse following heavy loss of body fluid.”

## **III Relationship between Blood and Body Fluid**

Both blood and body fluid belong to Yin, and both act to nourish and moisten. They supplement each other in physiology and affect each other in pathology.

Since they both derive from the essence of drink and food “body fluid and blood share the same source.” When infused into a blood vessel body fluid becomes a component of blood. Some components of blood may also seep out of the vessels and become part of body fluids.

Under abnormal conditions, when there is massive loss of blood body fluid enters the vessels to make up for the volume of blood. This in turn leads to insufficiency of body fluid and such symptoms as thirst, oliguria and dehydrated skin. Conversely, if there is massive loss of body fluid some components of blood can come out of the vessels, resulting in insufficiency of blood. The *Internal Classic* states: “Those who have lost much blood do not sweat. Those who have sweated profusely lack blood.” This is the practical application in clinical practice of the theory that “body fluid and blood share the same source.”

## Section 5 Transformation of Qi

The theory of Qi transformation is also an important component of CM. It is reflected in every phase, from the basic theories to all aspects of clinical practice. An accurate and thorough understanding of Qi and its transformation is necessary for the mastery of the CM theoretical system and its application.

### I Basic Concept of Qi Transformation

Qi transformation in philosophy refers primarily to its changes and transformation under certain conditions. In CM it applies principally to the metabolism and transformations of essence, Qi, blood and body fluid. As a matter of fact, the course of Qi transformation is the course of transformation of the materials and the functional capability in the body. The concept is a high level abstraction of the actions and transformations of Yin–Yang and of their responses to disease evils.

By the theory of the unity of Qi, when Qi is in a state of condensation it has form and is Yin. When Qi is dispersed it is formless and active, and is Yang. In CM the Yin and Yang aspects of Qi together constitute the foundation of human physiology. The normal movement and changes of Qi give rise to the regular changes from generation to growth and development, to reaping (essence) from the natural world and storing it. Qi transformation and its proper direction of movement are the physiological basis for many processes. These include the transformation of essence, the circulation of blood, the distribution of body fluid, the digestion of food, the absorption of nutrients, the excretion of waste, the moistening of tendons and bones, the moistening of skin and the resistance to external disease evils. The body’s physiological activities depend upon Qi transformation because it is their primary motive force.

In the broader sense, Qi transformation encompasses all the physiological activities as well as the movement patterns of Qi. In the narrower sense, it is the sanjiao harmonizing and regulating the metabolism of body fluid.

## II Motive Force for Qi Transformation

### 1 *Kidney's Primordial Yang as Source of Motive Force*

In the human body Qi transformation reflects the courses of the mutual transformation of essence, blood and body fluids, on the one hand, and the visceral organs and tissues. CM believes that primordial Yang of the kidney is the source of the motive force for Qi transformation. The *Classic on Medical Problems* states: "The active Qi between the kidneys determines a person's life. It is the root of the twelve meridians, and is termed primordial Qi." As this quote indicates, the active Qi between the kidneys is related to genuine Qi and is also related to the Fire of the Vital Gate. According to the Ming dynasty physician, Zhang Jingyue, "the Vital Gate is the root of primordial Qi and the house of functional Water and Fire. The Yin-Qi of the five *zang* viscera needs it in order to receive nourishment; and the Yang-Qi of the five *zang* viscera needs it in order to develop." He stressed that the Vital Gate contains Yin-Qi and Yang-Qi, Water and Fire, and these two forms of Qi are the root of innate Qi and the source of postnatal acquired Qi. He thus clarified that the essence of active Qi between the kidneys is the key of vitality.

Though physicians may differ in their opinions regarding the Vital Gate there is no dispute regarding its main physiological functions. The Vital Gate's most important function is to be the root of genuine Qi. It is the source of the body's warming capacity, and it warms all the internal organs and tissues and promotes their functional activities.

The kidney is the foundation of innate constitution of the human body and the root of Yin and Yang. As the foundation of innate constitution it has two meanings. The first is that the kidney houses essence, including both innate and acquired essence; and essence is the basic substance of life. The second is that the kidney contains the functional Fire of the Vital Gate; and this Fire is the motive force behind the vital activities and material transformations of the body. The relationship between essence and the Vital Gate is characterized as follows: "Qi generates essence" and "essence is transformed into Qi." The Fire of the Vital Gate depends upon essence as the basic biological substance for all the physiological activities. Essence depends on the functional Fire of the Vital Gate as the motive force for the warming transformation and distribution of all vital nutrients. If there is no Fire of the Vital Gate the body's essence will become a mere inert substance without the capability of nurturing life.

### 2 *Motive Force for Qi Transformation Is in Qi Itself*

The process of Qi transformation is a natural biological process. What the theory of Qi transformation insists upon is that one Qi embodies both Yin and Yang. The myriad things in the universe are generated through the opposition and mutual support

of Yin and Yang. Thus the motive force for Qi transformation resides within Qi itself. As the *Spiritual Pivot* states: “The upper-jiao is open and permits effusion. It assimilates and diffuses the flavors of the five grains; it warms the skin, nourishes the body; and it keeps the hair moist, like the sprinkling from fog and dew. Such are the actions of Qi.”

This quote shows that Qi itself possesses two entirely different tendencies and actions: ascending versus descending, and warming–evaporating versus moistening–nourishing. The Ming dynasty physician Wang Kentang said: “The one Qi contains within itself Yin and Yang, Heat and Cold, ascending and descending, and activity and quiescence.” This clearly indicates that Yin and Yang are both contained within Qi and that the interaction between Yin-Qi and Yang-Qi is the fundamental cause of Qi transformation.

### III Dynamics of Qi Transformation

The direction of movement of the various types of Qi in various physiological activities is the key for preserving normal Qi transformation. For certain physiological activities Qi needs to ascend, for others to descend. In ancient China, people often expressed these two movements in relation to “heaven” and “earth” – heaven pertains to Yang and Yang descends; earth pertains to Yin and Yin ascends. The *Plain Questions* states: “The ascent–descent of Qi is manifested in the alternation between heaven-Qi and earth-Qi.” Again: “Descent comes after ascending to the zenith, and the one that is descending pertains to heaven. Ascent comes after descending to the nadir, and the one that is ascending pertains to earth. Heaven-Qi descends and flows on earth. Earth-Qi ascends and soars in heaven. Hence the high and the low call each other; and ascent and descent cause each other, in so doing giving rise to all changes and transformations.” Again: “Clear Yang becomes heaven, turbid Yin earth. Earth-Qi ascends and becomes cloud; heaven-Qi descends and becomes rain. Rain comes from earth-Qi and cloud comes from heaven-Qi. Therefore, clear Yang exits the upper orifices and turbid Yin exits the lower orifices. Clear Yang diffuses into the interstices (of the body exterior) and turbid Yin flows into the *zang* viscera. Clear Yang invigorates the four extremities and turbid Yin returns to the *fu* viscera.” This quote uses the ascent, descent and mutual transformation of Water and Qi between heaven and earth as analogy for the metabolism and Qi transformation in the human body.

Whether Qi ascends or descends, or moves otherwise, is determined by the functional characteristics of the *zang-fu* viscera. The ascent–descent of Qi, and its entering–exiting, is a unity of opposites; but each visceral organ has a special effect on the ascent or descent of Qi. From the local point of view, it is not necessary that each physiological activity must have both ascent and descent, or entering and exiting; instead, each has its own pattern. For example, liver-Qi and spleen-Qi ascend, lung-Qi and stomach-Qi descend, heart-Yang descends, and kidney-Yin ascends. From the point of view of the totality of physiological activities of the

body, however, there must be dynamic equilibrium between ascent and descent, and between entering and exiting. Only then can normal physiological functioning be maintained. Thus, the ascending, descending, exiting and entering of Qi are an important factor in the regulation and balancing of the many physiological capabilities.

## IV Main Patterns of Qi Transformation

The main patterns of Qi's transformation of the body are as follows.

### 1 *Influence of Spleen and Stomach on Qi Transformation*

The movement of spleen-Qi and stomach-Qi is crucial for many processes in physiological metabolism. The spleen and the stomach are at the “center” in several ways. They are at the center physiologically since they are the generative source of Qi and blood and they supply nourishment to all the visceral organs. They are at the center anatomically since they are located in the middle-*jiao*, where many physiological activities and Qi on many specific missions converge. Hence, normal spleen and stomach functions affect the direction of Qi movement, and are crucial for the proper physiological functioning of the body. The spleen and the stomach serve as the pivot for Qi transformation in the body.

In their physiological capabilities the spleen and the stomach complement each other. The spleen is a Yin *zang* organ. Its Qi ascends, and it sends the essential nutrients from drink and food upward to the lung and the heart, where they are further transformed into Qi and blood. The stomach is a Yang *fu* organ. Its Qi descends, and it sends chyme from drink and food downward to the small intestine, where it is a source of body fluids, and it maintains normal digestion. Thus the ascent–descent of spleen-Qi and stomach-Qi is crucial in the production of Qi and blood and for the harmonious crossing of Qi in the middle-*jiao*. As the *Plain Questions* states: “Drinks enter the stomach. They are churned and their essential Qi is extracted. Essential Qi is then carried to the spleen and further distributed by the spleen-Qi. It goes up to the lung, where it regulates the water passages, and goes down to the bladder. In this way, water-essence is distributed throughout the body and the meridians.”

In pathology, if spleen-Qi fails to ascend, the pure essences cannot be transported upward to the lung and the heart to generate Qi and blood. Abdominal distention and diarrhea will result. If the diarrhea persists both Qi and blood may become deficient. When spleen-Qi fails to ascend it becomes trapped below, and this may cause ptosis or prolapse of such organs as the stomach, the liver, the kidney, the uterus, the vagina and the rectum. If stomach-Qi fails to descend, chyme cannot be delivered to the intestines. When stomach-Qi fails to descend, it may also rise abnormally, and this may cause nausea, hiccup, eructation and vomiting. As the *Plain Questions* states: “If clear Qi is trapped below there will be diarrhea. If turbid Qi rises abnormally there will be abdominal distention.”

## 2 *Influence of Lung and Liver on Qi Transformation*

In CM there is a saying: “Liver-Qi ascends on the left, and lung-Qi descends on the right.” “Left” and “right” are not used anatomically, however, but in the context of the theory of the Five Elements – Wood (liver) on the left and Metal (lung) on the right. The liver is in the lower-*jiao* and its Qi ascends and extends. The lung is in the upper-*jiao* and its Qi purifies and descends. The liver and the lung acting together ensure the smooth and balanced flow of Qi between the upper and lower *jiao* and among the *zang-fu* viscera. As the Qing dynasty medical expert Ye Tianshi said: “The human body corresponds with the natural world. The liver is on the left and its Qi rises; the lung is on the right and its Qi descends. When their ascent and descent are appropriate Qi moves evenly and smoothly. . . . The liver sends its Qi upward to the head and the upper orifices; the lung sends its Qi downward to the internal organs and sinews. When the two cooperate both Qi and blood flow smoothly and both organs (lung and liver) are harmonious.”

In pathology, failure of liver-Qi to ascend and spread is the main cause of its stagnation. Stagnation of liver-Qi can be expressed in many areas of the body, such as the chest, the epigastrium, the abdomen, the head, the throat and others. For example, when liver-Qi attacks the stomach there may be such symptoms as gastric pain, nausea and vomiting. When liver-Qi attacks the spleen there may be such symptoms as abdominal distention and diarrhea. Abnormal rise of liver-Qi can interfere with the lung’s depuration function, giving rise to coughing and labored breathing. The depuration action of the lung can induce Qi and fluids to move down to the kidney and bladder. If lung-Qi does not descend but becomes trapped in the chest there may be coughing and labored breathing. If lung-Qi cannot convey fluids downward there may be retention of urine and edema in the face.

## 3 *Influence of Heart and Kidney on Qi Transformation*

The heart is located in the upper-*jiao*; it houses the mind and its nature pertains to the Fire Element. The kidney is located in the lower-*jiao*; it stores essence and its nature pertains to the Water Element. The polarity of the heart and the kidney is the fundamental polarity between Fire and Water. Physiologically, heart-Fire descends into the kidney and, together with kidney-Yang, warms kidney-Water to prevent it becoming cold. Kidney-Water rises to the heart and, together with heart-Yin, moistens heart-Fire to prevent it from hyperactivity. The relationship between the descent of heart-Fire and the ascent of kidney-water must maintain the same balance as that seen between Water and Fire, between Yin and Yang, and between above and below. In CM this is known as “the harmony between the heart and the kidney” or “mutual support of Water and Fire.”

What is the mechanism underlying the balanced relationship between the heart and the kidney? The heart pertains to Fire but there is Water within Fire. The kidney pertains to Water but there is Fire within Water. When Water fails to ascend, it is due

to deficient kidney-Yang being unable to raise Water. When Fire fails to descend, it is due to deficient heart-Yin being unable to lower Fire. Consequently, there appears “disharmony between the heart and the kidney,” or “discordance between Water and Fire.” The development of disharmony between the heart and the kidney is usually due to kidney-Yin not being able to augment heart-Yin. If heart-Yin is unable to restrain heart-Yang then heart-Fire may blaze, causing insomnia, agitation and impatience.

The harmonious interaction between the heart and the kidney is pivotal to Qi’s ascent and descent, since the heart and the kidney directly affect the actions of Qi in other *zang* organs. On the one hand, the kidney and liver share a common source. If kidney-Yin cannot nourish liver-Yin liver-Yang will rise and become hyperactive, giving rise to headache, impatience and irascibility. On the other hand, the heart and the lung are both located in the upper-*jiao*. Deficiency of heart-Qi can impair the lung’s functions of dispersion and depuration and cause lung-Qi to become stagnant in the chest. This can give rise to tightness in the chest, coughing and labored breathing. The normal functioning of the spleen and the stomach is also dependent upon the balance between ascent and descent of heart-Qi and kidney-Qi. The heart and the kidney provide Fire and Water, which constitute the foundation for the stomach’s ability to receive and absorb and for the spleen’s ability to transform and transport the essence of drink and food.

#### 4 Transformation of Sanjiao-Qi

The sanjiao is one of the *fu* viscera; at the same time it encompasses all the internal organs (see Volume 1, Part I, Chapter 3, [Section 3, Subsection I](#), Sub-subsection 6). Its basic function is to ensure that all passages remain open, so that Qi can flow without impedance, water metabolism can proceed smoothly and wastes can be excreted properly. The sanjiao can facilitate the flow of genuine Qi, thereby providing the motive force for Qi throughout the body and for all the processes of metabolism. Hence, the *Classic on Medical Problems* states: “The sanjiao is the ambassador of genuine Qi. It controls the circulation of the three kinds of Qi and distributes them to the five *zang* and the six *fu* viscera.”

The sanjiao is the highway for the circulation of water-fluids. The *Plain Questions* states: “The sanjiao is the official in charge of dredging. From its action the waterways are cleared.” This explains that its main function is to enable the entire process of Qi-transformation of the body’s fluids and to ensure free passage through the waterways. If this function is impaired, Qi stagnates and so does water, resulting in edema and ascites. Every part of the sanjiao has its own functions, particularly concerning Qi movement.

In summary, the sanjiao controls the correct movement of every type of Qi and in this way ensures its proper actions. As Hua Tuo points out in the *Classic of the Secret Transmission*: “If the sanjiao is patent then all pathways are patent in the interior, in the exterior, on the left, on the right, above and below. In the task of irri-

gating the entire body, harmonizing the interior, regulating the exterior, nourishing the left and the right, and dispersing and conducting the upper and the lower, there is nothing more important than this.”

## **Guidance for Study**

### **I Aim of Study**

To understand and master the basic substances of the body’s vital activities and their actions, as well as the principles and patterns of functional activities and metabolism.

### **II Objectives of Study**

After completing this chapter the learners will

1. know the basic concept, the formation, the circulation, the actions and the classification of Qi;
2. understand the actions of genuine Qi, thoracic Qi, nutritive Qi and defensive Qi;
3. be familiar with the basic concepts of the formation, the circulation and the functions of blood;
4. know the concept, the formation, the distribution and the excretion of body fluids;
5. be familiar with the relationships among Qi, blood and body fluid;
6. be familiar with the basic concept, the mechanism and the movement patterns of Qi transformation.

### **III Exercises for Review**

1. What is Qi? What does its formation involve? What are its main actions?
2. Describe the formation, the circulation and the actions of genuine Qi, thoracic Qi, nutritive Qi and defensive Qi.
3. Describe the similarities and differences between nutritive Qi and defensive Qi with regard to their formation, circulation and actions?
4. How is blood generated? And what are its functions?
5. What are body fluids? Which internal organs are involved in their formation, distribution and excretion?
6. What is the relationship between Qi and blood in physiology and in pathology? What is the relationship between Qi and body fluids in physiology and in pathology?

7. What important roles do the spleen and the stomach play in the process of formation of essence, Qi, blood and body fluids?
8. What does Qi transformation mean? How does one understand the motive force of Qi transformation of the human body?
9. How are the patterns of Qi transformation mainly manifested?
10. In what way are the spleen and the stomach the pivot of the ascent and descent of Qi?
11. In what way is the interaction between the heart and the kidney the root of the ascent and descent of Qi?

## Chapter 5

# Etiology in Chinese Medicine

The human body is an organic whole. At the same time there is an intimate relationship between the human body and its environment. This relationship is one of dynamic balance of opposition in unity between the internal environment of the body and its external environment. It is by maintenance of this dynamic balance that the body's vital activities are assured. Should this dynamic balance be disturbed, for any reason, and the body unable to restore it spontaneously, illness can result. The factors that lead to such disturbances are the causes of illnesses.

There are many causes of illness in CM. Examples include unusual climatic conditions, contagious pestilence, inappropriate diet, fatigue or exhaustion, passion, traumatic injury, and injury by animals and insects. In order to comprehend the nature and pathogenic characteristics of these causes ancient physicians made a number of attempts to classify them. The *Internal Classic* was the first to classify causes of illness by Yin–Yang. Thus, the *Plain Question* states: “(Disease-causing or pathogenic) Evils are born of either Yin or Yang. Those born of Yang derive from wind, rain, cold or heat; those born of Yin derive from inappropriate drink and food or improper living accommodations. Joy and rage are also Yin or Yang.” The Han dynasty physician Zhang Zhongjing pointed out, in the *Essentials from the Golden Chest*, that there were three mechanisms for illness to develop. “The thousand illnesses can all be subsumed in three groups. The first group comprises interior illnesses caused by external evils attacking the meridians and invading the *zang-fu* viscera. The second group comprises exterior illnesses caused by blockage of meridians, hence blood stasis, in the four limbs and the nine orifices. The third group comprises injuries caused by intemperate sexual activity, and wounds from weapons, animals and insects. All causes are accounted for by this classification.” The Song dynasty physician Chen Wuzhe advocated the Theory of Three Causes; namely, external causes (invasion by the climatic pathogenic evils), internal causes (injury by the passions), and causes that are neither external nor internal (inappropriate diet, exhaustion, trauma, animal and insects). These classificatory attempts by the ancients to combine pathogenic factors and the courses of illnesses are highly significant in clinical diagnostics.

In CM there is no illness that does not have a cause. Every illness reflects the body's response to its causative factor and its actions. In the course of any illness cause and effect interact, so that what may be an effect at one phase may in another

be a cause. Phlegm accumulation and blood stasis, for example, are effects of the dysfunction of Qi-blood of the *zang-fu* viscera, yet they can induce certain pathological changes.

In addition to understanding the nature and properties of the causes of illness, the study of etiology is mainly the attempt to determine the natural course of illness on the basis of clinical manifestations. This approach is known in CM as “seeking the cause through syndrome analysis.” Thus, the study of etiology in CM attends not only to the nature and pathogenic characteristics of the causes of illness, but also the clinical manifestations they induce. In this way it provides the basis and guide for treatment and herbal prescription.

## Section 1 External Causes of Illness

The external causes of illness are factors that originate from the natural world and that invade the body mainly by means of the exterior of the body, the mouth and the nose. The external causes include the climatic pathogenic evils and the pestilential pathogenic evils.

### I Climatic Pathogenic Evils

#### 1 Introduction

There are six climatic pathogenic evils. They are Wind, Cold, Heat, Dampness, Dryness, and Fire. Under normal conditions they are known as the “six Qi” and are six different kinds of climatic conditions of the environment. These six Qi are necessary for all things to grow, and as such are quite harmless to the human body. However, when the weather changes in abnormal ways and when the body’s genuine Qi (primordial Qi) is insufficient, with reduction in the body’s ability to resist disease, then these six Qi can turn into the six evils. Weather changes may be abnormal when they are excessive or deficient; or they may occur out of season (such as exceptionally cold spring or hot autumn); or they may be very abrupt (such as a sudden heat wave or a sudden cold spell).

The characteristics of these six climatic pathogenic evils can be described as follows.

1. **Exogenous Contraction.** In general, when the six pathogenic evils cause disease they do so by attacking the exterior of the body, or by invading through the mouth or nose. For this reason, they are also known as “the six external evils.”
2. **Season Dependence.** The illnesses caused by these climatic pathogenic evils are correlated with the seasons. For example, Wind illnesses are particularly common in spring, Heat illnesses in summer, Dampness illnesses in mid-summer, Dryness illnesses in late autumn, and Cold illnesses in winter.

3. **Locale Dependence.** The propensity of the six pathogenic evils to cause illness is intimately related to the locale and environment of the person. For example, Cold or Dryness illnesses are common in the northwestern highlands. Dampness or Heat illnesses are common along the southeastern seaboard. People who live in damp areas frequently contract Dampness illnesses. People who work in very warm areas frequently contract Dryness-Heat or Fire illnesses. (Note that this discussion is specific to China, though applicable to other regions that are on the eastern seaboard of continents in the northern temperate zone.)
4. **Concurrent Attack.** Each of the six pathogenic evils can assail the body individually, but in most situations two or three attack the body concurrently. For example, the common cold is due to Wind and Cold; diarrhea is often due to Dampness and Heat; and rheumatism is often due to Wind, Cold and Dampness.
5. **Changeability.** During the course of pathogenic caused by these evils, not only can the evils affect one another, but they can also under certain conditions transform into one another. For example, when the Cold evil enters the interior of the body it can transform into Heat; and prolonged Dampness-Heat can transform into Dryness and injure Yin.

In modern clinical practice the external pathogenic evils encompass not only climatic factors but also biological (bacteria, viruses), physical and chemical factors. Thus using the six evils to capture all exogenous pathogenic evils and to study the course and progression of diseases through the interaction of causes and responses may not be very detailed; but it is a relatively correct approach.

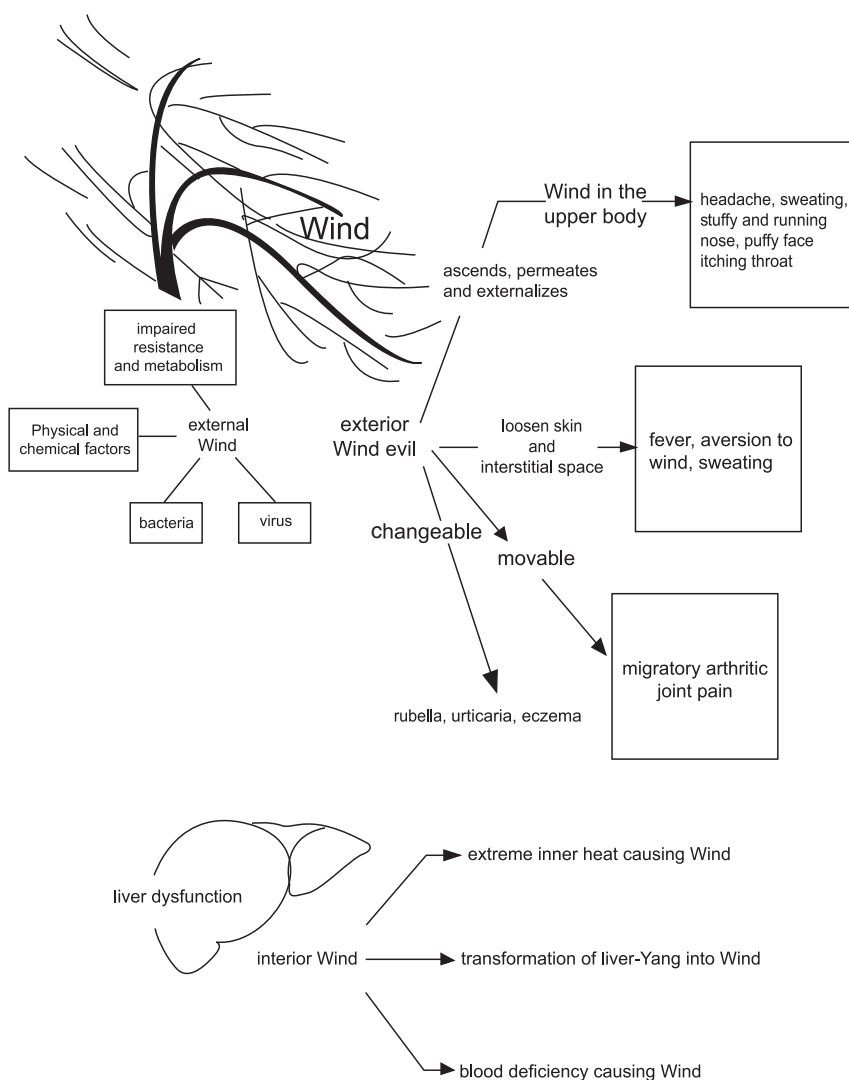
## 2 *Nature and Pathogenic Characteristics of Climatic Pathogenic Evils*

### i Wind

Wind is the dominant climatic factor in spring, but is present in all four seasons. Hence, although Wind-induced illnesses are most common in spring they can be seen in other seasons as well. In CM the Wind evil is a very important cause of illnesses due to exogenous factors.

The nature and pathogenic characteristics of Wind are as follows (see [Fig. 5.1](#)).

1. Wind is a Yang evil. Its nature is to open and permeate, and it has great ability to invade the Yang sites in the body. Wind evil is swift and does not rest. Its characteristics are to rise, to permeate and to move outward; hence it is a Yang evil. The opening and permeating ability of Wind means that it can easily penetrate the skin and enter the interstices. It often attacks the head, the Yang meridians, and the superficies; and it often induces such symptoms as headache, sweating and aversion to wind.
2. Wind is mobile and changeable. Wind being mobile means that when causing disease it can move quickly from site to site without being tied to any one.



**Fig. 5.1** Wind evil

For example, in rheumatic and rheumatoid arthritis induced by Wind, Cold and Dampness, migratory pain of the joints is a symptom of Wind; because of this the condition is often called “migratory rheumatism” or “Wind rheumatism.” Wind being changeable means that diseases it induces are fast changing and unpredictable. For example, Wind-induced urticaria (hives) is characterized by wheals that are itchy and evanescent and that can appear unpredictably in different areas.

3. “Wind is the chief of all illnesses.” (*Plain Questions*) It is the most important of the climatic pathogenic evils, since the other climatic pathogenic evils all invade the body with its help, as in illnesses caused by Wind-Cold, or Wind-Heat,

or Wind-Dampness. Thus, Wind is often the vanguard for the other external pathogenic evils. Indeed, ancient physicians even used Wind as the general name for external causes of illness.

## ii Cold

Cold is the main climatic pathogenic factor in winter. In the cold temperature of winter, or when the temperature abruptly drops, measures for preserving body warmth may be insufficient and people are often susceptible to the Cold evil.

There are two types of Cold illnesses: exogenous and endogenous Cold illnesses. Exogenous Cold illnesses are those caused by the Cold evil attacking from the outside. They can be further grouped into “Cold injury,” due to Cold attacking the exterior of the body and being confined there by defensive Yang-Qi, and “Cold invasion,” due to Cold directly attacking the interior and damaging the *zang-fu* viscera. For endogenous Cold diseases see [Section 3, Subsection III, Sub-subsection 2](#).

The nature and pathogenic characteristics of Cold are as follows (see [Fig. 5.2](#)).

1. Cold is a Yin evil; it is the expression of abundant Yin. Hence, Cold easily injures Yang-Qi in the body. When Yang-Qi is injured it loses its normal warming action and Cold illnesses due to Yang deficiency and Yin abundance may develop. If external Cold attacks the superficies and defensive Yang is checked then there is cold-aversion. If external Cold invades the spleen and the stomach causing injury then there are coldness and pain in the abdomen, vomiting and diarrhea.
2. The nature of Cold is to gel and stagnate. Once Yin-Cold evil becomes strong it can damage Yang-Qi, and deficiency of Yang-Qi can cause stasis of Qi and blood in the meridians. Such impedance causes pain; hence in most diseases of Cold there is the symptom of pain. It is as the *Plain Question* states: “Pain is caused by Cold-Qi; hence where is Cold there is pain.” If the Cold evil enters the interior directly there will be cold pain in the abdomen, even colicky pain.
3. It is the nature of Cold to contract. When it attacks the body Cold can restrain Qi, so that the interstitial spaces, the meridians, their collateral vessels, and the sinews all contract or go into spasm. When Cold attacks the superficies the pores and interstitial spaces become closed and defensive Yang is unable to spread. There will then be cold-aversion and fever without sweating. When Cold invades the meridians, Qi and blood will gel and the blood vessels will become constricted, and there will be headache, generalized body aches and a tight pulse. If Cold enters the meridians and the joints they go into spasm and contract; then the limbs become contracted and unable to straighten or cold and numb.

## iii Summer Heat

Illnesses of Summer Heat are prominently seasonal, occurring mostly between summer solstice and autumn equinox. The *Plain Questions* states: “Before the summer

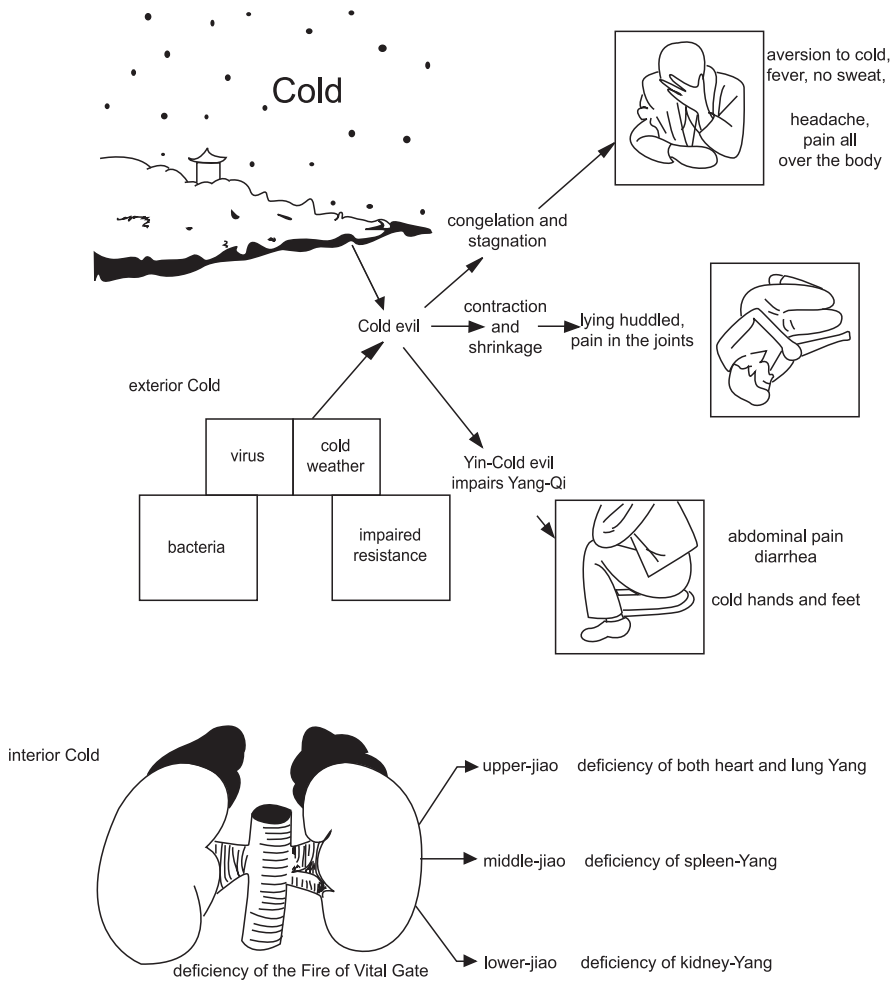
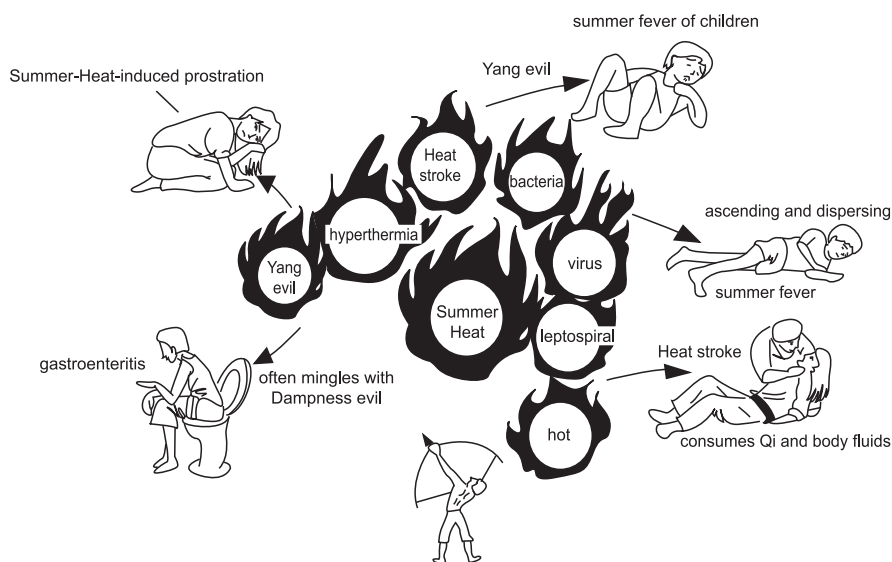


Fig. 5.2 Cold evil

solstice it is a warming disease. After the summer solstice it is a Summer Heat disease.” Unlike the other climatic pathogenic evils Summer Heat is purely exogenous; there is no endogenous summer Heat.

The nature and pathogenic characteristics of Summer Heat are as follows (see Fig. 5.3).

1. Summer Heat is a Yang evil. Its nature is very hot. Summer Heat derives from the transformation of the severe Heat summertime. When attacked by Summer Heat patients uniformly show serious Yang-Heat symptoms, such as high fever, agitation, a flushed face and a pulse that is surging and large.
2. The nature of Summer Heat is to ascend and disperse, and it consumes Qi and body fluids. When it invades the human body it tends to enter the Qi Level of



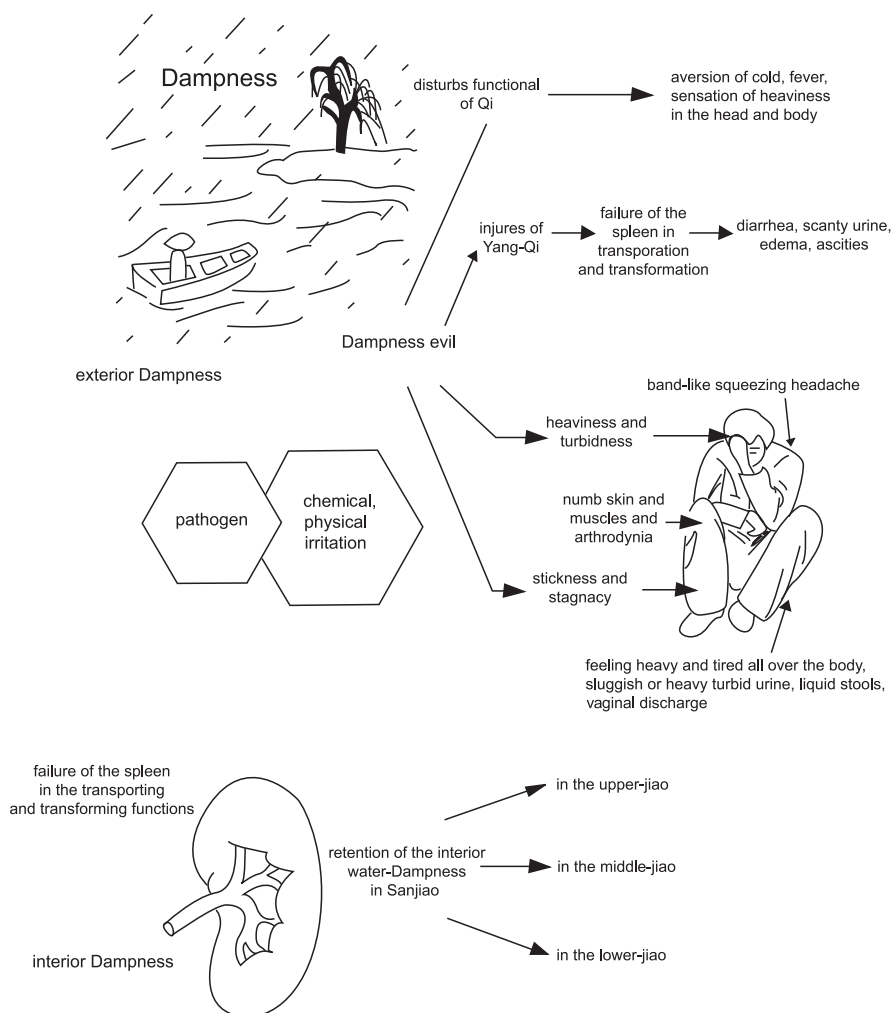
**Fig. 5.3** Summer Heat evil

warm illness (see Volume 1, Part II, Chapter 9, Section 5, [Subsection II](#)) directly and induce profuse sweating. Profuse sweating will consume body fluids and cause fluid deficiency, which is manifested as oliguria and thirst with a desire to drink. The Summer Heat evil can also disturb the mind, causing restlessness and agitation. During profuse sweating Qi often escapes with the sweat, resulting in Qi deficiency. Thus, patients suffering from Summer Heat illnesses often exhibit shortness of breath and fatigue, sometimes even sudden loss of consciousness.

3. Summer Heat is often mingled with Dampness. In addition to being very hot, summer usually comes with much rain and high humidity. Hence, when Summer Heat induces illness it is often accompanied by Dampness. In clinical practice, in addition to fever and thirst there are often symptoms of Dampness, such as fatigue in the limbs, tightness in the chest, nausea and vomiting, and very loose feces.

#### iv Dampness

Dampness is the dominant climatic pathogenic factor of late summer. The period of transition from summer to autumn is the wettest season of the year (in eastern China). Illnesses of Dampness also fall in two broad groups: exogenous and endogenous Dampness illnesses. Exogenous Dampness illnesses usually result from very damp climate, exposure to rain or water, or a damp residence. Endogenous Dampness illnesses arise when the spleen's transforming function is weak, so that Dampness accumulates. Although these two types of Dampness differ, they often affect each other in the course of illnesses.



**Fig. 5.4** Dampness evil

The nature and pathogenic characteristics of Dampness are as follows (see Fig. 5.4).

1. Dampness is a Yin evil, and tends to obstruct Qi movement and consume Yang-Qi. Dampness is heavy and turbid, and its nature resembles that of water. When it invades the body it tends to settle in the *zang-fu* viscera and their meridians, where it readily impedes the movement of Qi. This inhibits the free ascent and descent of Qi and blocks the meridians, producing such symptoms as chest tightness, gastric distention, scant urine with dysuria, and difficulty with defecation. Because Dampness is a Yin evil, when it invades the body it readily injures Yang-Qi. Exogenous Dampness often accumulates in the body and the spleen

tends to be the first organ it damages, so that spleen-Yang cannot be aroused and its transportation and transformation functions ineffective. The stagnated Dampness accumulates and can lead to diarrhea, oliguria, edema and ascites.

2. The Dampness evil is heavy and turbid. “Heavy” means that a patient with an exogenous Dampness illness often has a headache that is like the head being bound tightly, heaviness and tiredness in the entire body and aches and heaviness in the limbs. “Turbid” generally means that the secretions are not clear. When Dampness causes illness there may be many symptoms of turbidity and contamination, such as a dirty-looking face, cloudy discharge from the eyes, diarrhea with feces containing mucus or bloody pus, cloudy urine, profuse vaginal discharge in women, and weeping eczema.
3. Dampness is glutinous and viscous. These properties are manifested in two ways. First, the fluids of secretions and excreta are viscous. Second, illnesses caused by the Dampness evil tend to persist and be difficult to eradicate, and they often recur. Examples include rheumatism and eczema.

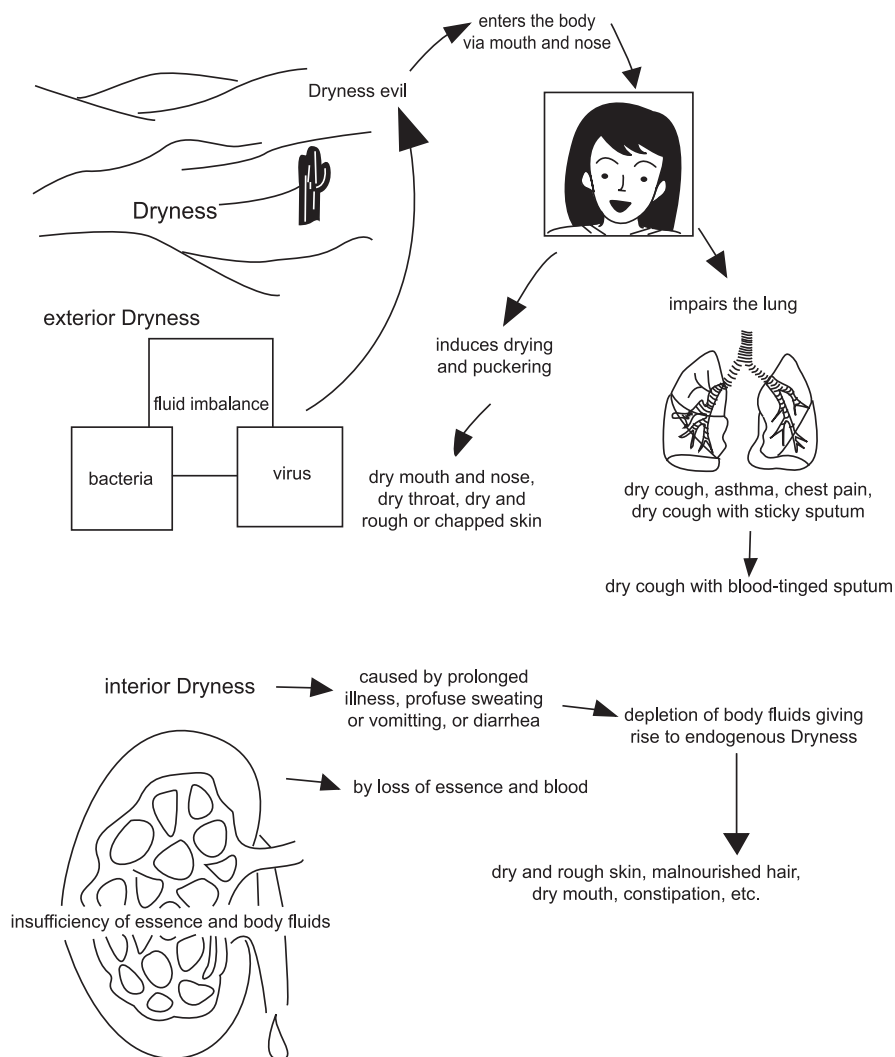
Dampness tends to move downward and readily attack the Yin sites of the body. It belongs to the Water Element, and the Water Element tends to move downward. Thus, illnesses caused by Dampness tend to cause symptoms mainly affecting the lower parts of the body. For example, edema is generally more conspicuous in the lower limbs. Also, cloudy urine, vaginal discharge and mucoid diarrhea are mostly due to the descent of the Dampness evil.

## v Dryness

1. The nature of Dryness is to dry and pucker. It readily damages body fluids and can cause deficiency of Yin and fluids, manifested by a dry mouth and nose, a dry throat, thirst, dry and rough or chapped skin, malnourished hair, scanty urine and constipation. If Dryness attacks the exterior accompanied by Wind, Dampness or Heat, there may be poor circulation or a variety of skin diseases (see [Fig. 5.5](#)).
2. Dryness easily injures the lung. The lung is the “delicate organ” and likes being moist and dislikes being dry. When Dryness attacks the human body it mostly enters by the mouth and nose, and can readily damage lung-fluids and affect the lung’s dispersion and depuration functions. Such symptoms as a dry cough with little sputum, or thick viscous sputum that is difficult to expectorate, or sputum with streaks of blood, and labored breathing with chest pain.

## vi Fire

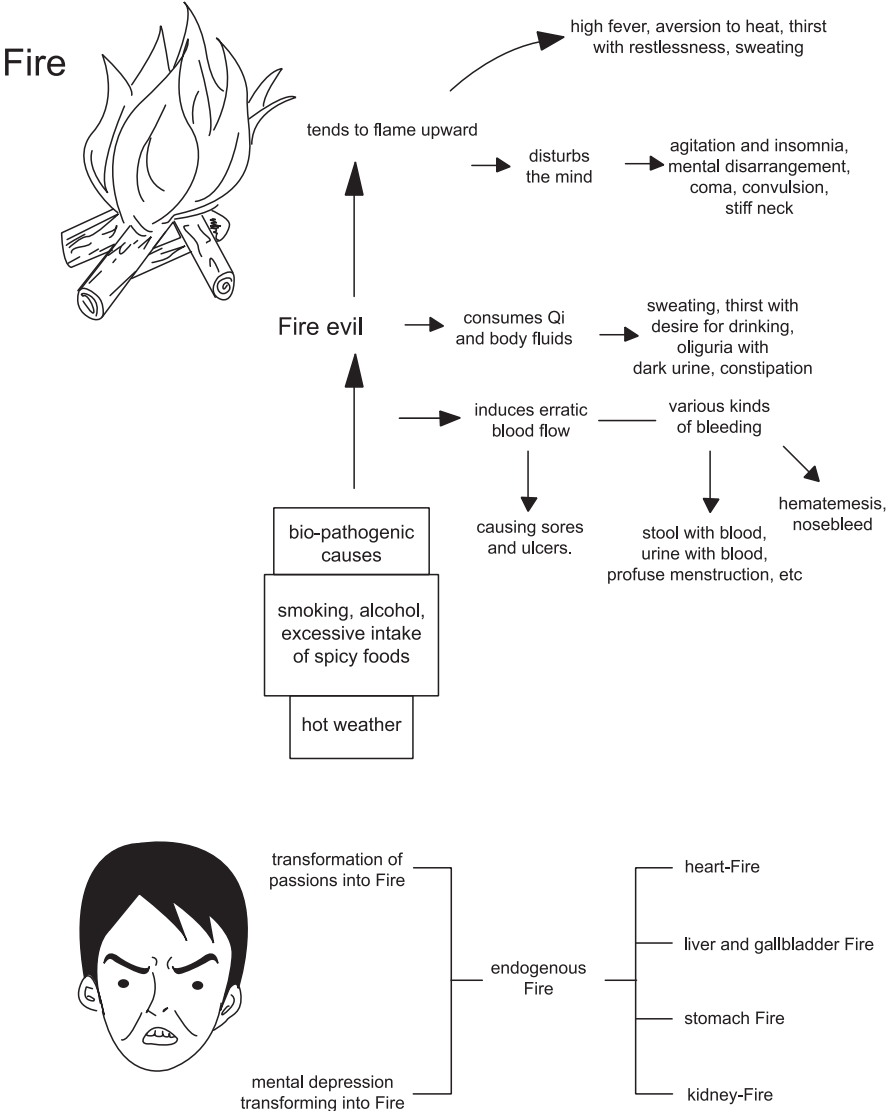
Fire is transformed from excessive Yang-Qi. It can readily intermix with Summer Heat. However, though they are similar there is a difference: Summer Heat is gradual whereas Fire is an extreme form of Heat.



**Fig. 5.5** Dryness evil

Illnesses of Fire can also be exogenous or endogenous. An illness of exogenous Fire generally results from direct attack by warmth or Summer Heat. An illness of endogenous Fire generally results from disharmony of Yin, Yang, Qi and blood of the visceral organs with exuberant Yang-Qi and deficient of Yin-Qi. Furthermore, when the passions become extreme they also can, under certain conditions, produce Fire – hence the sayings, “the five Qi transforming into Fire” and “the five passions transforming into Fire.”

The nature and pathogenic characteristics of Fire are as follows (see Fig. 5.6).



**Fig. 5.6** Fire evil

Fire is a Yang evil, and its nature is to burn and flame up. Because Fire burns, when it causes illnesses mostly there are high fever, aversion to heat, thirst, restlessness, sweating, and a surging and rapid pulse. Because it flames up, most clinical symptoms involve the upper body, such as sore throat and inflamed gums. Since the heart is classified under the Fire Element (see Volume 1, Part I Chapter 1, [Section 2, Subsection III](#)), the Fire evil can readily (though indirectly) disturb the

mind, producing such symptoms as agitation and insomnia, or irascibility and erratic behavior, or delirium and incoherent speech.

Fire damages body fluids effectively. It easily forces fluids to the outside and exhausts Yin-fluids. Hence, when the Fire evil causes illness there often are such symptoms as thirst with desire for drink, dry throat and parched tongue, scant dark red urine and constipation, in addition to fever.

Fire readily induces Wind and stirs up blood, known in CM as “extreme Heat generating Wind.” When the Fire evil invades the human body it often burns the liver meridian and consumes its Yin-fluids. This causes the sinews to lose their nourishment and moisture and induces the internal movement of liver-Wind. The typical symptoms are high fever, delirium with incoherent speech, convulsion with rolling up of the eyes, and opisthotonos. The Fire evil also stimulates blood to move rapidly, scorching the vessels and inducing frenetic blood movement. As a result, hematemesis, epistaxis, hematochezia, hematuria, skin purpura, and excessive menses or metrorrhagia may occur.

Fire also easily causes sores and ulcers. When the Fire evil reaches the Blood Level of the warm diseases (see Volume 1, Part II, Chapter 9, Section 5, Subsection IV) it can force blood to stagnate in a region, causing necrosis then ulceration. Clinically, inflamed swellings and ulcers are all attributable to Yang and to Fire.

## II Pestilential Pathogenic Evils

The pestilential pathogenic evils are a group of highly contagious causes of diseases. As recorded in the CM literature, it is variously called pestilence, perverse Qi, strange Qi and toxic Qi.

Diseases caused by these pestilential evils characteristically begin suddenly, are severe, have similar symptoms and courses of progression, and are highly contagious. They also tend to develop into epidemics. The *Plain Question* states: “When the five types of pestilence rage everyone may be attacked through spreading from person to person. Regardless of age, adult or child, all patients exhibit similar symptoms.”

Such diseases may occur sporadically or epidemically. Examples include mumps, fulminant dysentery, diphtheria, scarlet fever, smallpox, and cholera. This group of diseases includes several modern epidemic diseases and severe infectious diseases.

The causes of these diseases are various types of pestilential Qi, but there are several other involved factors. In addition to the relative strength or weakness of genuine Qi in the population, the following are also important.

Climatic factors, such as unusual variations in weather, prolonged droughts, extreme heat, dense fog and noxious fumes, can all foster the growth and transmission of pestilential Qi and promote the development of epidemics.

Inadequate environment, poor sanitation (polluted air or water) or contaminated foods also conduce to the development and progression of epidemics.

Preventive and control measures, such as quarantine, are effective measures for preventing the development or spread of epidemics. If these measures are not implemented in time, epidemics may arise and spread.

Social factors, such as war, societal turmoil, state poverty or backwardness, and unsatisfactory working environment can all contribute to the rise or spread of epidemics (see Fig. 5.7).

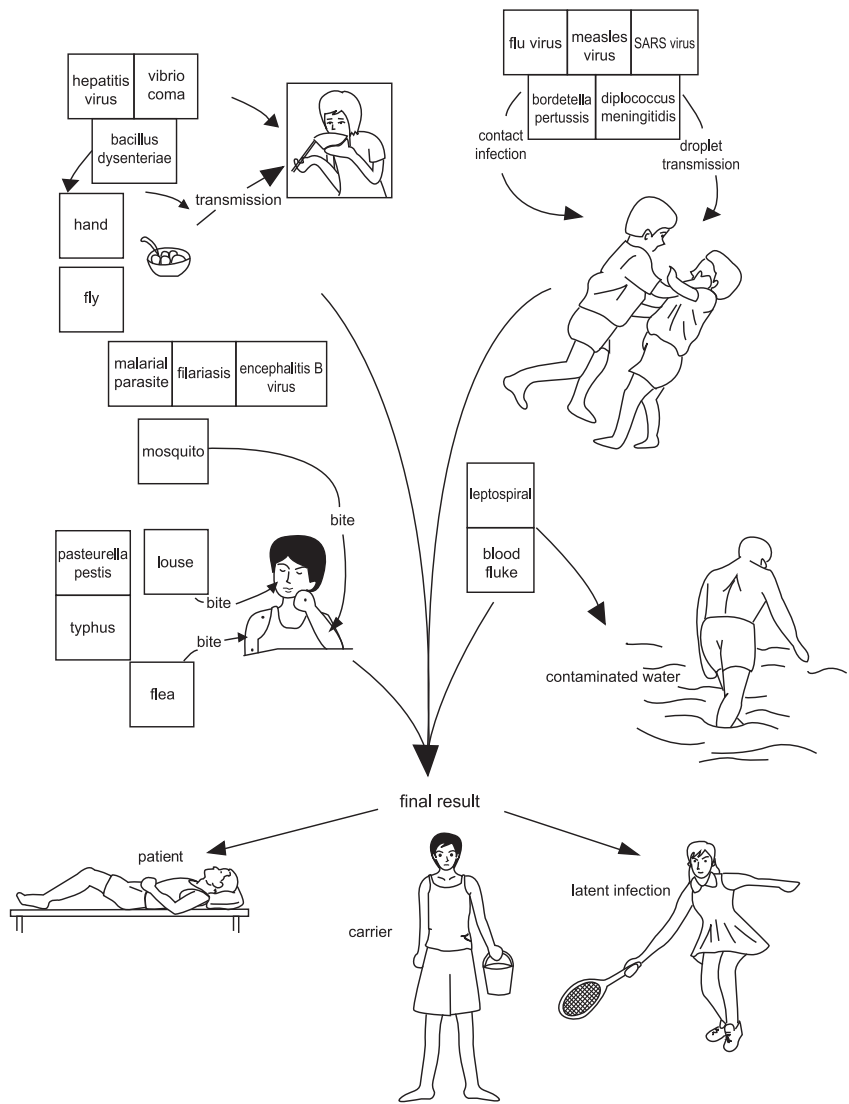


Fig. 5.7 Pestilential evils

## Section 2 Internal Causes of Illness

The internal causes of illness are factors that directly disrupt Qi and blood of the *zang-fu* viscera. This group comprises the seven passions, inappropriate diet, and imbalance between work and rest.

### I Passions as Causes of Illness

The seven passions are joy, rage, grief, brooding, anxiety, fear and fright. These are extremes of the emotions that are the mind's responses to the environment. In normal circumstances, emotions do not cause disease. It is only when they become passions – because of sudden appearance, or extreme intensity, or prolonged duration – that they exceed the body's normal range of mental activities. When this happens, Qi is disturbed and the balance between Yin and Yang, and between Qi and blood, of the *zang-fu* viscera is lost; and illness may ensue.

#### 1 *Relationship Between Passions and Qi-Blood of Zang-Fu Viscera*

In humans the emotions are intimately related to the *zang-fu* viscera, and the functions of these viscera require the warming and activating actions of Qi and nourishment from blood. The *Plain Questions* states: “The human has five *zang* viscera, which engender five kinds of essential Qi and produce the passions of joy, rage, brooding, grief, and fright.” From this quote it is clear that emotional activities are dependent upon the visceral organs' essential Qi. The *Plain Questions* also states that the heart's passion is joy, the liver's is rage, the spleen's is brooding, the lung's is grief, and the kidney's is fear. These five are sometimes collectively known as “the five passions.”

The different passions have different effects on the different *zang* organs. Conversely, the changes in the Qi and blood of the *zang-fu* organs also influence the passions. Thus the *Plain Questions* states: “Superabundance of blood generates rage, whereas insufficiency of blood generates fear.” The *Spirit Pivot* states: “Deficiency of liver-Qi generates fear, whereas excess of liver-Qi generates rage. Deficiency of heart-Qi generates grief, whereas excess of heart-Qi generates sustained laughter.”

## 2 *Characteristics of Passions*

### i *Direct Injury of Zang-Fu Viscera*

The *Plain Questions* states: “Rage impairs the liver”; “(Excessive) Joy impairs the heart”; “Brooding impairs the spleen”; “Grief impairs the lung”; and “(Excessive) Fear impairs the kidney.” However, in clinical practice, the responses can be more variable, since the human body is an organic whole. For example, bottled up rage can impair the liver, so that liver-Qi moves abnormally. It often also impairs the spleen and the stomach, leading to disharmony between liver and spleen or between liver and stomach.

At the same time the visceral organs’ Qi and blood provide the material basis for emotional activities. The heart governs blood and houses the spirit; the liver stores blood and governs conduction and facilitation; and the spleen governs transportation and transformation and is the source of Qi and blood. Therefore, illnesses caused by emotional factors usually relate to disharmony between the Qi and blood of the heart, the liver and the spleen. For example, excessive joy, fright and brooding all can impair the heart and induce unrest of the heart-spirit. This in turn can lead to such symptoms as palpitation of the heart, insomnia, forgetfulness, and even derangement of the mind (see [Fig. 5.8](#)).

### ii *Effects on the Activities of Qi of Zang-Fu Viscera*

The passions cause injury to the internal organs principally by affecting their respective Qi mechanisms and causing disturbances in Qi and blood movement and actions.

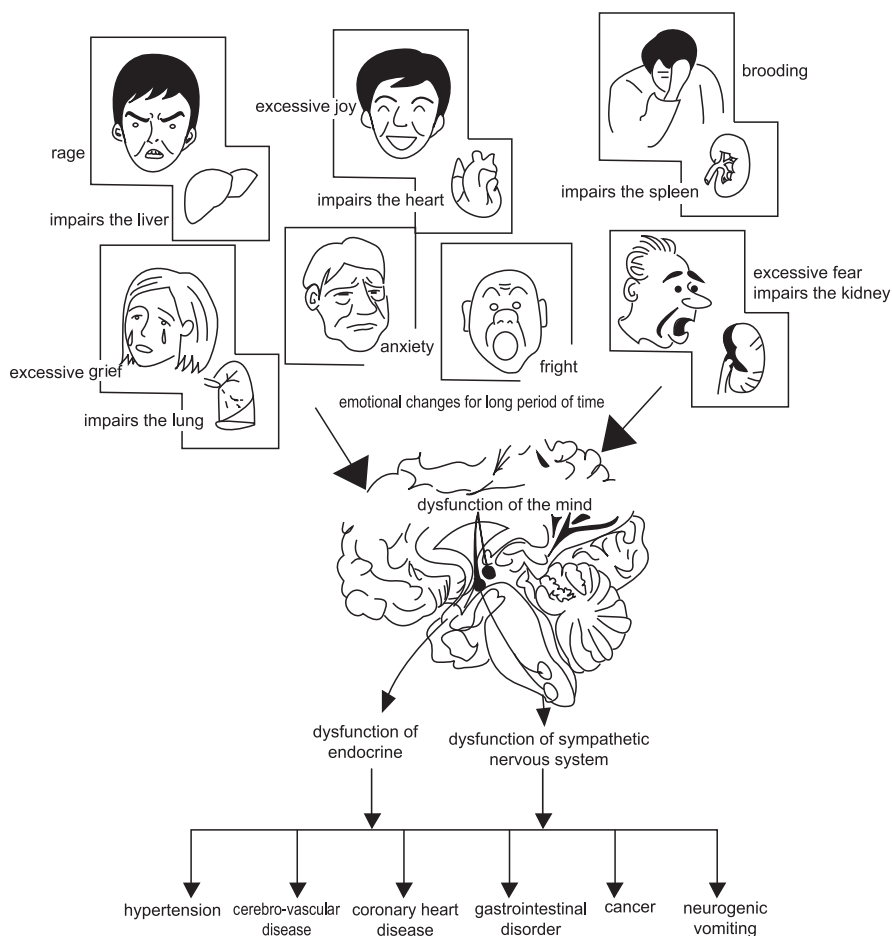
“Rage causes Qi to rush up.” Rage can impel liver-Qi to move upward abnormally. Blood follows Qi and rises abnormally as well. Clinically, we see such symptoms as flushed face and red eyes, or hematemesis, or even syncope.

“(Excessive) Joy causes Qi to slacken.” Under normal conditions appropriate joy relaxes mental tension, frees the movement of nutritive and defensive Qi, and produces a happy and relaxing mood for the person. Excessive joy, however, induces slackening of heart-Qi and insecurity of the heart-spirit, leading to such symptoms as inability to concentrate and absent-mindedness. In severe cases there may be delirium or mania.

“Grief causes Qi to disperse.” Uncontrolled grief can cause the dispersion or constraint of lung-Qi, damaging it. This can lead to depression of the mind, shortness of breath, a weak voice, fatigue and weakness, and lassitude of spirit.

“(Excessive) Fear causes Qi to sink.” Clinically there may be incontinence of urine and feces, spontaneous seminal emission or even syncope.

“Fright causes the derangement of Qi.” This means that sudden fright causes the heart to lose its support, the spirit to lose its house, and thought to lose its abode. This is manifested clinically as palpitation of the heart and panic.



**Fig. 5.8** Passions as causes of illness

“Brooding causes Qi to bind.” Excessive pensiveness or brooding can injure both the heart-spirit and spleen-Qi, and constrain Qi. It wears down Yin and blood. Loss of nourishment for the heart-spirit may lead to palpitation of the heart, forgetfulness, insomnia and excessive dreaming. Stagnation of Qi can lead to dysfunction of transportation and transformation by the spleen and the reception and decomposition of foods by the stomach. Food retention, abdominal distention and diarrhea may result.

### iii Effect on the Courses of Illnesses

From clinical observation, in the course of many diseases wide fluctuations in emotion often aggravate the patients’ condition or cause it to deteriorate rapidly. For

example, in a patient with a history of high blood pressure sudden rage can induce liver-Yang to become hyperactive. This in turn can cause the blood pressure to rise precipitously, leading to dizziness, sudden fainting, or hemiplegia with deviation of the eyes and twisting of the mouth. Heart illness is also often aggravated by the passions.

## II Diet, Maladjustment of Work and Rest

### 1 *Impairment due to Improper Diet*

Food and drink are the source of nutrients that are indispensable substances for maintaining the vital activities of the human body. An improper, unclean or unbalanced diet often causes illnesses. Since food and drink are digested and absorbed by the spleen and the stomach, an improper food mainly impairs the spleen and the stomach, leading to dysfunction of the ascent and descent of spleen and stomach Qi. It can also lead to the accumulation of Dampness, the formation of Phlegm, the generation of Heat, or transformation into other illnesses.

#### i **Unregulated Intake**

The amount of food and drink should be appropriate, as excessive or inadequate food and drink may cause disease. If intake is insufficient the source of generation of Qi and blood is reduced and they lack sufficient nourishment. Over a period of time this may result in deficiency of Qi and blood, leading to illness. Conversely, excessive indulgence can overwhelm the capacity of the spleen and the stomach to digest, absorb and transport. This can lead to retention of food, injury to the spleen and the stomach, and cause such symptoms as abdominal distention, fetid eructation, acid reflux, anorexia, vomiting or diarrhea. The *Plain Questions* states: "Too much drink and food can injure the intestines and the stomach." Indeed, indulgence in fats and sweet foods is likely to engender endogenous Heat, sometimes producing carbuncles, gangrene and skin ulcers.

#### ii **Contaminated Food and Drink**

Eating food or drink that has been contaminated or has spoiled can lead to a variety of stomach and intestinal disorders. These produce such symptoms as abdominal pain, vomiting, diarrhea and dysentery. Doing so can also cause parasitic infestations, such as roundworms (ascariasis), pinworms (oxyuriasis), or tapeworms (taeniasis), and these can produce abdominal pain, pica and emaciation. Sometimes contaminated or spoiled food or drink can contain poisons, causing severe abdominal pain, vomiting or diarrhea, and in severe cases coma or death.

### iii Unusual Cravings and Imbalance

Food and drink should be appropriately regulated, without unusual cravings or imbalance, in order to ensure that the body receives all the necessary nutrients. If food and drink are too cold or too hot, or there are unusual and unbalanced cravings, the equilibrium of Yin–Yang may be disturbed, or some essential nutrients may become lacking.

Essence, vitality, Qi, and blood are all nourished by the five flavors, and the five flavors have affinity for the *zang* viscera respectively. According to the *Plain Questions*, “when the flavors enter the stomach, each seeks its preferred organ. The sour first goes to the liver; the bitter first goes to the heart; the sweet first goes to the spleen; the acrid first goes to the lung; and the salty first goes to the kidney.” If there is sustained preference for any one flavor, that corresponding *zang* organ may become overly stimulated and over time there may be injury to the visceral organs.

The *Internal Classic* has pointed out this correlation (see also the section on the theory of the Five Elements in Volume 1, Part I, Chapter 1). Excessive intake of sour foods can over-stimulate the liver and impair the spleen, and lead to thickening and wrinkling of the skin and parched and cracked lips. Excessive intake of salty food can over-stimulate the kidney and impair the heart, and lead to sluggish circulation, tightness in the chest with shortness of breath and a lusterless complexion. Excessive intake of sweet foods can over-stimulate the spleen and impair the kidney, and lead to darkening of the complexion, tightness of the chest with shortness of breath, lumbar and knee aches, and hair loss. Excessive intake of bitter foods can over-stimulate the heart and impair the lung, and lead to loss of moisture from the skin, loss of body hair and disharmony between the spleen and the stomach. Excessive intake of acrid foods can over-stimulate the lung and impair the liver, and lead to dull and dry nails and spasm of the sinews.

Thus, the diet should balance the five flavors appropriately and avoid strong preferences. A proper diet is especially important during an illness, and should be adjusted throughout the course of the illness. This will help the treatment and speed recovery; conversely, the illness may be aggravated.

Strong preference of either cold or hot foods can also induce illness. For example, excessive intake of cold or raw foods can injure the Yang-Qi of the spleen and the stomach and engender exogenous Cold and Dampness, and lead to abdominal pain and diarrhea. Excessive intake of acrid or hot foods can induce Heat accumulation in the stomach and intestines, and lead to thirst, abdominal distention and pain, constipation or hemorrhoids.

An appropriate intake of alcoholic drinks can promote blood circulation and loosen up the sinews. But excessive intake over time can lead to disease. The nature of alcohol is hot and damp, and its excessive intake can injure the spleen, the stomach and the liver, so that endogenous Dampness and Heat are engendered. Clinically, such symptoms as abdominal distention, reduced appetite, bitterness and greasiness in the mouth and a thick and greasy tongue coating can appear (see [Fig. 5.9](#)).

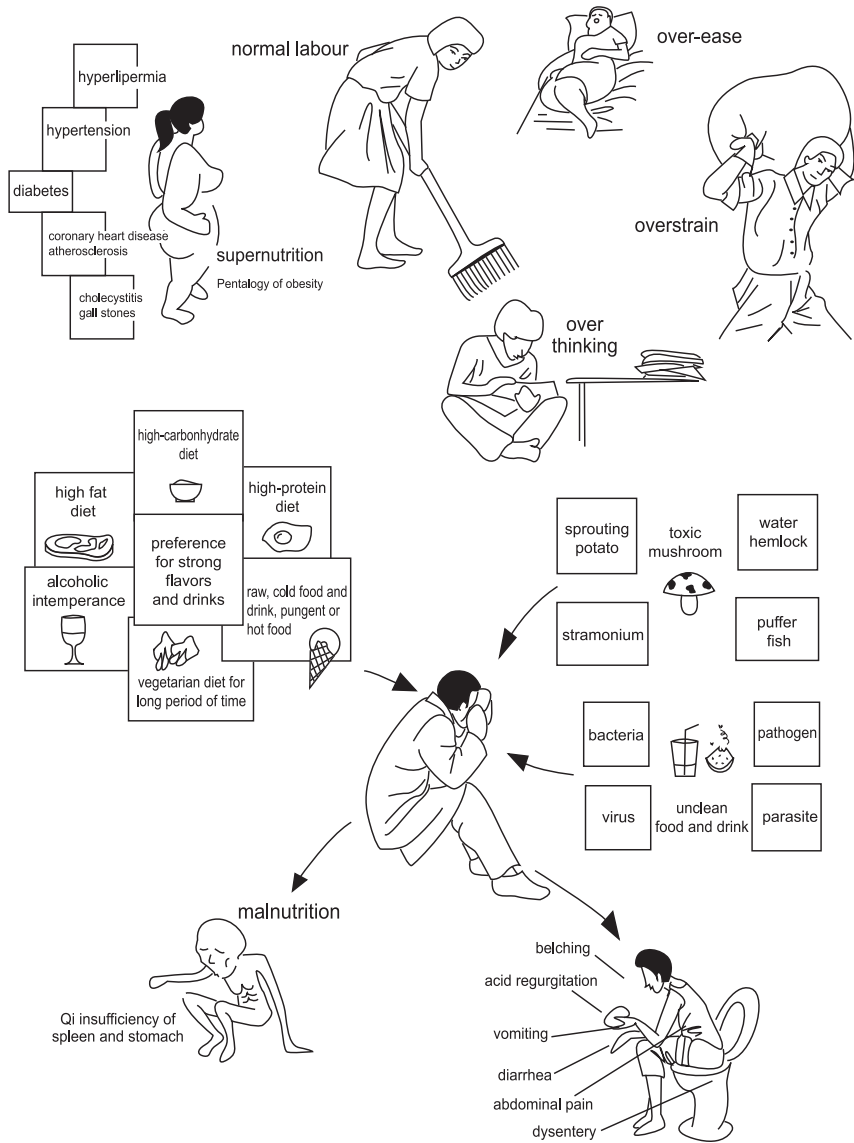


Fig. 5.9 Other internal causes of illness

## 2 Maladjustment of Work and Rest

Maladjustment of work and rest includes over-exertion and over-rest. Generally speaking, normal physical activities and training are helpful for the circulation of *Qi* and blood and for strengthening physique. Necessary rest will eliminate fatigue, restore physical and mental strength.

## i Over-Exertion

Over-exertion includes excessive physical labor, mental strain and sexual indulgence.

**Excessive Physical Labor.** This means excessive labor lasting over a long time. The main effect of physical over-exertion is to damage the body's primordial Qi, which can lead to reduction in stamina with disinclination to speak, mental fatigue and lassitude, and emaciation. In addition, some structures involved in the labor may suffer damage. As the *Plain Questions* states, "Prolonged standing damages bones. Prolonged walking damages sinews."

**Excessive Mental Strain.** This wears out heart-blood and damages spleen-Qi; thus the heart-spirit loses its nourishment. It can lead to palpitation of the heart, forgetfulness, and insomnia with excessive dreaming. In addition, spleen dysfunction can lead to food retention, abdominal distention and loose feces.

**Excessive Sexual Indulgence.** This leads to exhaustion of kidney-essence. Clinically, there often are lumbar and knee aches and weakness, blurred vision and tinnitus, dispiritedness and reproductive dysfunction. In males there may be nocturnal emission, premature ejaculation, or even impotence. In females there may be menstrual irregularities or infertility.

## ii Excessive Rest

This denotes excessive rest and comfort with little physical labor or exercise activity for a long time. The human body requires an appropriate amount of physical activity everyday, in order for Qi and blood to circulate smoothly. Absence of physical activity for a long time can easily impede Qi and blood circulation and impair spleen and stomach functions, and lead to loss of appetite, loss of strength, listlessness, weak limbs and trunk, or obesity. There may be palpitation of the heart and labored breathing even on slight exertion, and profuse sweating. Other illnesses may ensue. This is what is meant by the *Plain Questions*: "Prolonged lying in bed damages Qi. Prolonged sitting damages muscles."

## Section 3 Other Causes of Illness

### I Traumatic Injuries

This category is very broad and includes injuries from falls, gunshots, sharp or blunt objects, animal bites, sports injuries, burns and scalds, frostbites, and many others.

Such injuries often cause wounds, painful swelling, bleeding, bleeding under the skin or in the muscle, blood clots, bone fractures, sprains or tears of sinews. In severe cases there may be additional injury of internal organs, or massive hemorrhage. In

such cases, there may be Yin depletion or Yang collapse, leading to coma, shock or even death.

In mild cases of burns or scalds, the damaged area will immediately appear red and swollen, with sensation of pain and warmth, and blisters may occur. In severe cases, there may be injury to the muscles, sinews and bones. The burned area may look like leather or white wax, or have a charred appearance. In even more severe cases, the burn area may be very large; there is serious damage to the body fluids and the Fire evil attacks the interior, with resultant agitation, restlessness, fever, thirst, oliguria or anuria, or even death.

Frostbite refers to general or local injuries caused by prolonged exposure to cold, or exposure to extreme cold, or contact with a very cold object (see [Fig. 5.10](#)).

Bites by insects and animals, including poisonous snake, beasts of prey, rabid dog, and stings by scorpions, wasps or bees, may cause local wounds. In mild cases there may be localized swelling, pain, laceration or bleeding. In severe cases there may be severe laceration and bleeding in the internal organs as well as in the skin; there may be massive hemorrhage, leading to death. Bites by poisonous snakes will have in addition symptoms of poisoning by the venom in the whole body. If not treated in time, death from the venom may ensue. Bites by rabid dogs may at first be manifested only by pain and bleeding in the wound. Even if the local wound heals, however, symptoms of rabies may appear after a latent period. These include agitation, fearfulness, convulsions, and fear of water and of wind. In some cases of traumatic injury, lockjaw and tetany may appear, progressing to death.

## II Pathological Products That Lead to Illnesses

In the course of certain illnesses certain products may be formed under the influence of the actions of the pathogenic factors. Once formed, these products may themselves directly or indirectly disturb the viscera and the tissues, resulting in new disorders. Hence they are also pathogenic factors.

The main products in this group are Phlegm, rheum and blood stasis.

### 1 *Phlegm*

Phlegm can be generated when water metabolism is disordered. In general it is viscid and turbid. Phlegm may be classified as “visible” or “invisible.” Visible Phlegm is sputum. Invisible Phlegm is that which has accumulated in organs, meridians and other structures, though it cannot be seen directly. It occurs in such conditions as scrofula and subcutaneous nodules.

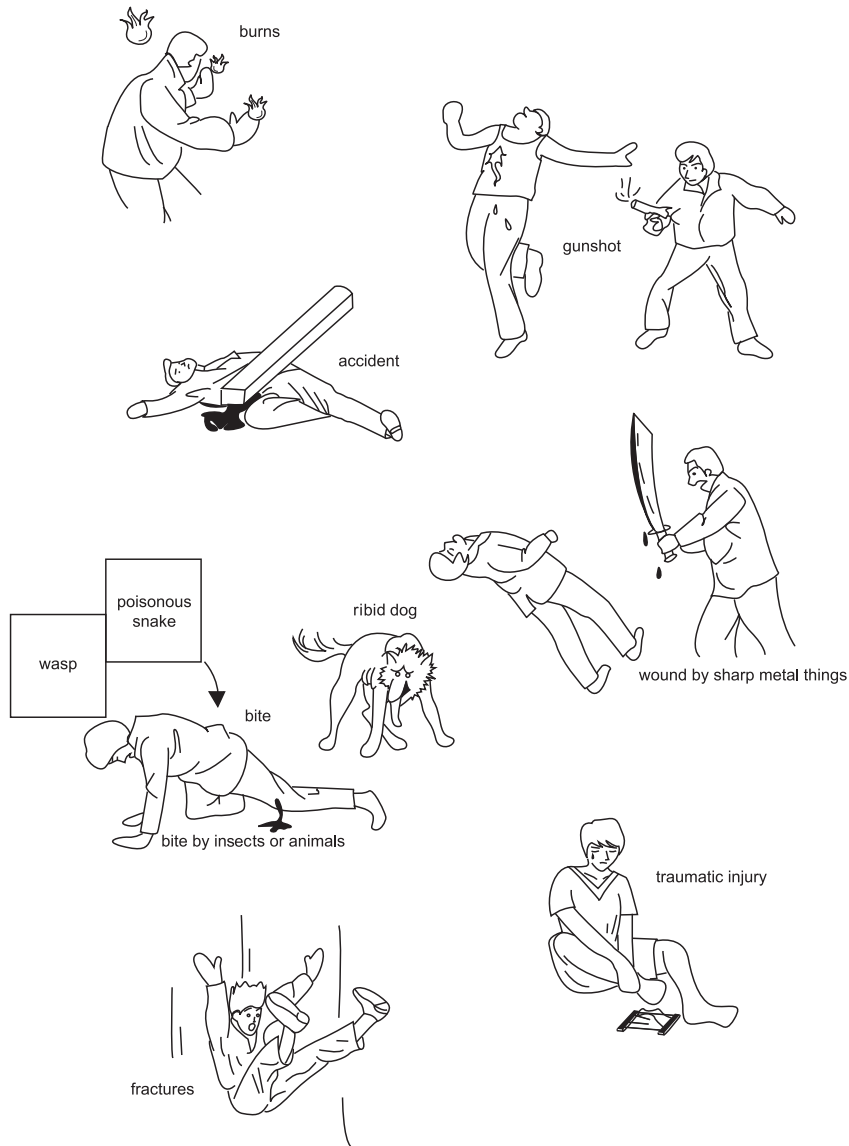


Fig. 5.10 Traumatic injuries

i Formation of Phlegm

Phlegm forms mostly when body fluids stagnate as a result of disturbances in water metabolism caused when the transforming ability of the lung, the spleen, the kidney and the sanjiao is disrupted by the climatic evils, inappropriate food and drink or the passions.

## ii Characteristics of Phlegm Disorders

**Obstructing Qi Actions and Qi-Blood Circulation.** Phlegm moves along with Qi and reaches all parts of the body, but it impedes the ascent and descent of Qi. It can also lodge in the meridians where it can interfere with the circulation of Qi and blood. For example, stagnation of Qi and blood in the limb meridians can cause numbness of the limbs, difficulty in flexion and extension, and sometimes hemiplegia. If Phlegm accumulates under the skin it can induce goiter, scrofula, nodules, cysts and multiple abscesses.

**Obstructing the Actions of Visceral Qi.** When Phlegm accumulates in the body it can readily impede visceral Qi. For example, if it accumulates in the lung it can block dispersion and depuration by that organ, and lead to chest tightness, cough, expectoration of sputum, and labored breathing. If it accumulates in the heart it can impede the flow of heart-blood, and lead to chest tightness and heart palpitation. If it accumulates in the stomach it can cause failure of stomach-Qi to descend, and lead to nausea, vomiting and epigastric distention.

## iii Variety of Phlegm Diseases

Because Phlegm follows Qi and can reach the entire body, it can induce a large variety of disorders – from the skin, tendons and bones, to all the internal organs. This gives rise to the saying, “The hundred diseases are mostly due to Phlegm.” For example, if Phlegm lodges in the head there may be dizziness with blurred vision; if in the heart-orifices there may be mental confusion; if Phlegm-Fire disturbs the heart there may be mental derangement; and if in the throat there may be globus hystericus (see [Fig. 5.11](#)).

## 2 Rheum

Like Phlegm Rheum is generated when the climatic evils or inappropriate food and drink disrupt water metabolism, or when the passions disrupt the transforming ability of the lung, the spleen, the kidney and the sanjiao. In general it is a thin and clear fluid that can accumulate in various parts of the body. Rheum in the intestines may cause abdominal gurgling or rumbling. Rheum in the chest wall may cause swelling and fullness and pain on coughing. Rheum in the chest cavity may cause chest tightness, coughing, shortness of breath, inability to lie flat, and puffiness. Rheum in the superficies may cause general edema, absence of sweat, and heaviness of the limbs.

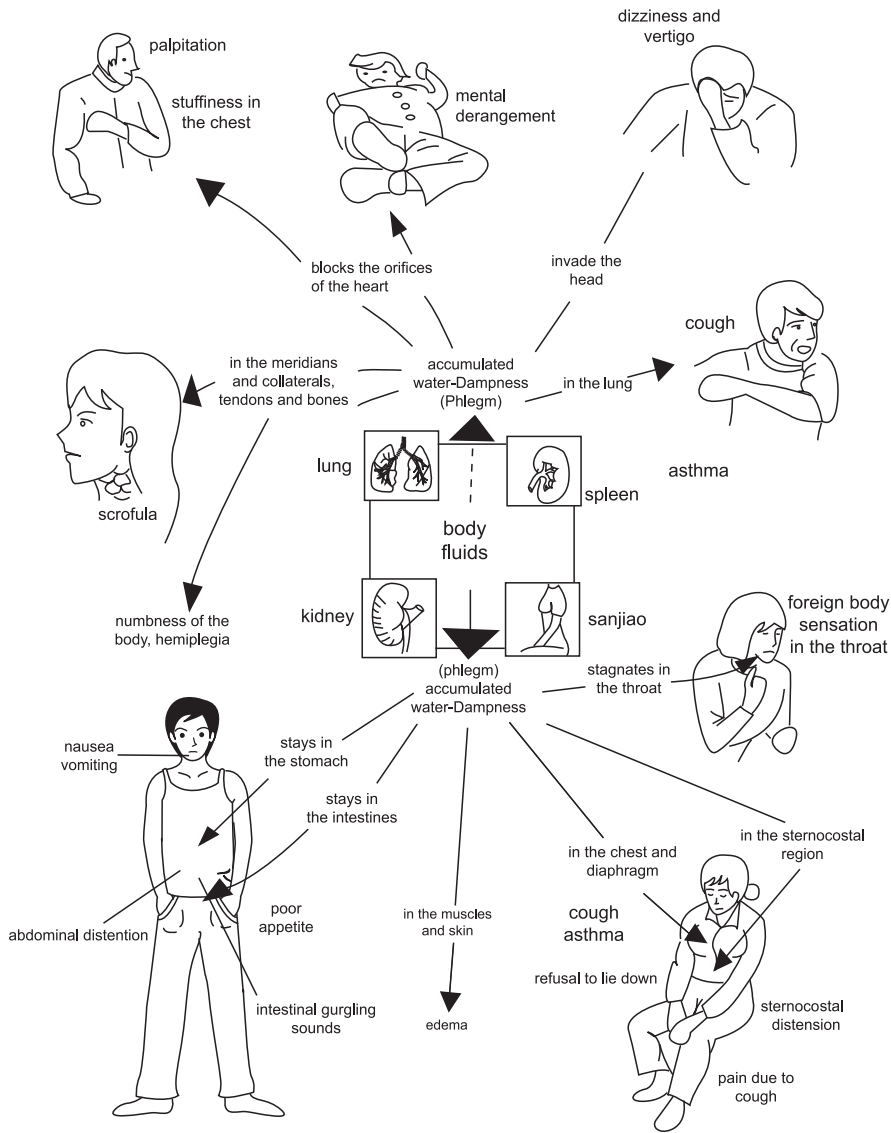


Fig. 5.11 Pathological products as causes of disease

### 3 Blood Stasis

This is an accumulation of stagnant blood. Static blood includes blood that has left the meridians (hematoma) or blood that is blocked in a meridian or an organ. As the product of an abnormal process static blood can also cause illnesses, since it can lead to pathological changes.

## i Formation of Blood Stasis

**Disease Evil Lodged in Vessels.** Both exogenously and endogenously caused illnesses can lead to the blood stasis. Among the external causes of illness the Cold evil is the most likely, because of its nature to contract and gel. When the Heat or Fire evil lodges in the vessels they boil and concentrate blood, or the Heat evil blocks blood flow and forces the blood to extravasate. In both cases they induce stasis of blood. Excessive emotional upheaval can cause blood to flow abnormally, in that way also fostering blood stasis. For example, depression may lead to the stagnation of liver-Qi; and rage can lead to abnormal ascent of blood and Qi. In both cases, blood stasis may result, stabbing pain in the chest, ribs or in the head.

**Disharmony of Actions of Visceral Qi and Blood.** The normal circulation of blood and fluids depends upon the cooperative actions of the *zang-fu* viscera. Any significant disturbance of these actions can cause impedance to blood flow and lead to blood stasis. For example, if the lung loses its diffusion or the liver loses its dispersion and depuration and facilitation then Qi is impeded and blood stasis can form. When heart-Qi is deficient there is not sufficient motive force for blood circulation. When spleen-Qi is deficient there is no control over blood, so that blood extravasates.

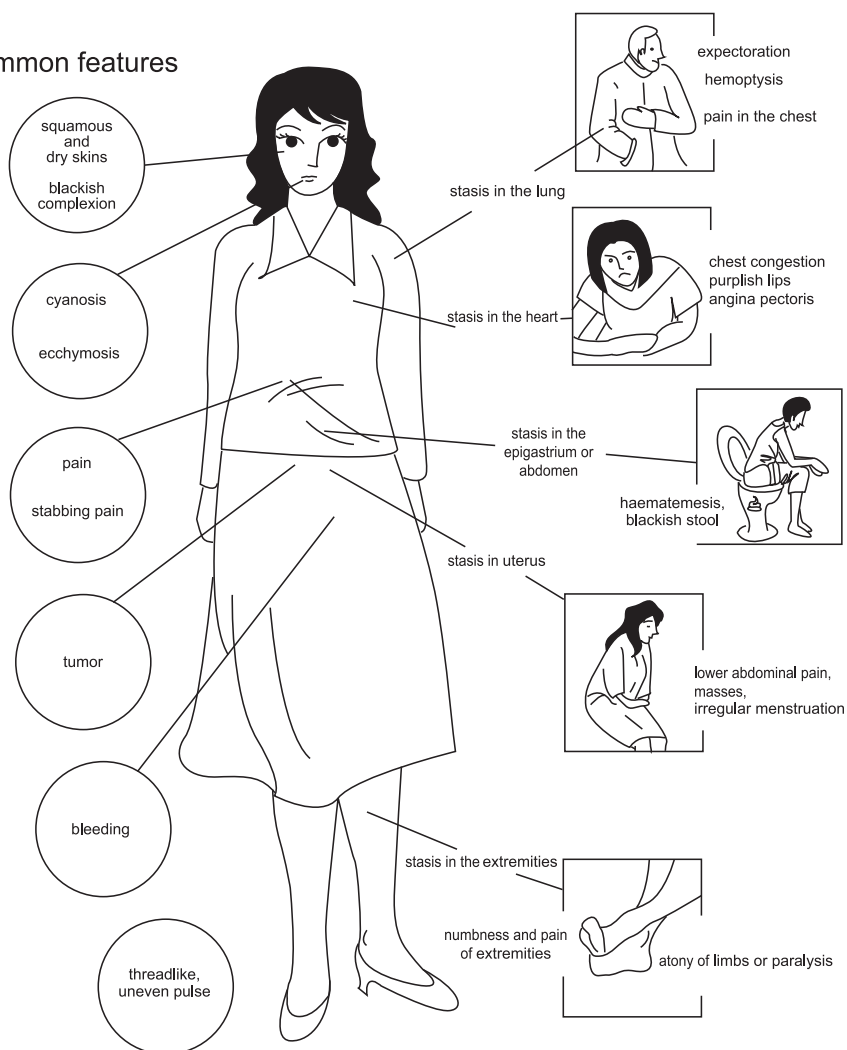
**Trauma.** Physical trauma or carrying excessive burdens can all lead to local stagnation of Qi and blood or injury of the collaterals, and lead to blood stasis. Different kinds of bleeding can also lead to blood stasis – for example, bleeding in the visceral organs, bleeding under the skin, and bleeding following childbirth. In addition, chronic diseases can lead to Qi deficiency, loss of motive force for blood circulation and blockage of the meridians. Under such conditions, blood stasis can gradually develop.

## ii Characteristics of Static Blood-Induced Conditions

**Variable Location and Manifestations.** This characteristic is due to the fact that blood stasis can develop in many different areas and it can result from many different factors. This can be illustrated by many examples. Blood stasis in the heart can produce palpitation of the heart, chest tightness, precordial pain, and cyanotic nail beds and lips. Blood stasis in the lung can produce chest pain and hemoptysis. Blood stasis in the stomach and the intestines can produce hematemesis and melena. Blood stasis in the liver can produce flank pain and abdominal mass. Blood stasis attacking the heart can induce raving behavior. Blood stasis in the uterus can produce pelvic pain, irregular menses, painful menstruation, amenorrhea, and vaginal discharge of dark purple clots or metrorrhagia. Blood stasis in an extremity of a limb can produce deep ulcers. Localized blood stasis elsewhere on a limb can produce circumscribed purple and painful swelling (see [Fig. 5.12](#)).

**Common Characteristics.** Though the diseases and conditions caused by blood stasis are so different they still share some common characteristics.

## common features



**Fig. 5.12** Static blood-induced conditions

**Pain:** it is mostly stabbing, fixed in position, and more severe at night.

**Swelling:** it is fixed in position. If due to trauma on the body surface it is partially purple. If internal it is mostly felt as a mass that is hard to the touch.

**Bleeding:** the blood is mostly dark purple in color, or contains clots.

**Lusterless skin and nails:** the complexion is dark or cyanotic; the skin is dry and rough, and the lips and nail beds are cyanotic.

**Tongue appearance:** the tongue is purple and dark, sometimes speckled with purple spots; the vessels under the tongue may be purple, with varicosity.

**Pulse:** the pulse is mostly threadlike and impeded, deep and taut, or intermittent.

## 4 *Stones*

Stones are formed when turbid Dampness and Heat accumulate in the body and are heated for a long time. The most common stones are those of the stomach, the gallbladder and the kidney. Stones are the result of certain pathological processes, but are in turn causes of additional illnesses.

### i Formation of Stones

**Unbalanced Dietary Preferences.** Chronic unbalanced preference for greasy and sweet foods or indulgence in alcohol and milk can affect the digestive functions of the spleen and the stomach. This leads to the generation of endogenous Dampness and Heat, which accumulate in the liver and the gallbladder. They form a mass in the gallbladder and after a long time it transforms into a stone. If Dampness and Heat lodge in the lower-*jiao* and disrupt Qi transformation, they may turn into stone in the kidney.

**Inappropriate Diets.** Eating too many persimmons or dates on an empty stomach, especially if raw or not peeled or with seeds, can interrupt the stomach's decomposing and descending functions and lead to stomach stone. Also, in some localities the quality of the water supply may also contribute to stone formation. For example, regular drinking of very hard water can lead to kidney stones.

**Internal Injury by Passions.** Disharmony of mental activities and passions and stagnation of liver and gallbladder Qi can disrupt the liver's facilitation function and the smooth secretion of bile. Mixing of bile with Dampness and Heat for a long time can lead to the formation of gallstones.

**Erroneous Herbal Medicines.** Long-term intake of medicines containing calcium, magnesium or bismuth can affect the stomach's decomposition of foods and downward transportation of chyme, and lead to stomach stones. Long-term intake of certain alkaline medicines or mineral medicines can affect the transformation of kidney and bladder Qi, causing impeded water flow and kidney stones.

### ii Characteristics of Stone-Induced Disorders

Stones mostly affect the *fu* organs. Though kidney stones are seen clinically, most often they are gallbladder stones, stomach stones and urinary bladder stones. The reason is principally because all six *fu* organs are hollow and convenient locations for stones to form.

**Prolonged Course and Varied Symptoms.** Stones form from stagnant Qi and blood due to Dampness and Heat. Apart from stomach stones, the others form after a prolonged course. Clinically, the symptoms vary considerably depending upon the size of the stones and their location. In general, small stones tend to cause milder symptoms, sometimes even without symptoms, whereas large stones tend to cause more severe symptoms.

**Ready Blockage of Qi Movement and Injury of Meridians.** Stones have material form. As they lodge in the organs they readily impede Qi movement and actions. This in turn affects the circulation of Qi and blood, the metabolism and transportation of food and drink, and the excretion or secretion of fluids. Stones in the stomach, for example, can inhibit stomach-Qi movement and affect the decomposition and transportation of water and grains. The stones may even pass down to the intestines and cause blockage there. Stones in the gallbladder can affect the conducting and dispersing function of the liver and gallbladder, and the normal excretion of the bile. Stones in the kidney and the urinary bladder can lead to disturbance of water metabolism. In addition, stones may damage blood vessels and cause bleeding.

**Colicky Pain.** When stones lodge inside the body and affect the free movement of Qi and blood, in general there are regional distention and pain. When a stone blocks a passageway severe colicky pain can develop. For example, gallstones can produce severe cramps in the right flank, which radiates to the right shoulder. Kidney stones can produce severe cramps in the waist and pelvic abdomen, which radiates to the insides of the thighs. During attacks of these cramps the pain is difficult to withstand and is often accompanied by cold sweats, nausea or vomiting.

Phlegm, Rheum, blood stasis and stones are material products of pathological processes. They share the characteristics of blockage of Qi movement, prolonged course and a wide variety of symptoms. There are differences, however. Phlegm and Rheum flow with Qi and blood throughout the body, and their effects are diverse and unpredictable. On the other hand, though blood stasis and stones can occupy different locations and show varied symptoms, the pain of blood stasis tends to be sharp and stabbing, whereas the pain of stones tends to be colicky.

### III The Five Endogenous Pathogenic Evils

In CM the six climatic pathogenic factors – Wind, Cold, Heat, Dampness, Dryness, and Fire – are external disease-causing agents. Clinically, there are some conditions that have similar features to those caused by these exogenous agents but are caused by endogenous factors arising out of imbalance of Yin–Yang or Qi–blood, disturbance of the body fluids, or dysfunction of the *zang–fu* organs. To distinguish these factors from the climatic pathogenic evils CM terms them endogenous Wind, endogenous Cold, endogenous Dampness, endogenous Dryness and endogenous Fire.

#### 1 Endogenous Wind

The *Guide to Clinical Practice* states: “Endogenous Wind is the abnormal movement of the body’s Yang-Qi.” It is a condition of liver-Yang being overactive and moving upward adversely; hence it is also known as the internally stirring

liver-Wind. It arises when Yang is exuberant or when deficient Yin is unable to restrain Yang. The main symptoms are sudden shakes, dizziness or vertigo, spasms or tremors, or convulsion.

There are four main types of endogenous Wind.

### **i Liver-Yang Transforming into Wind**

This occurs when the passions or over-exertion injure liver and kidney Yin, so that Yang rises without restraint and the Water Element fails to nourish the Wood Element.

Clinically, illnesses of endogenous Wind manifest muscular twitching and cramping, numbness, tremor of the limbs, unsteady gait, vertigo, deviation of the mouth and eyes or hemiplegia. In severe cases, there may be sudden loss of consciousness, collapse or coma.

### **ii Extreme Heat Generating Wind**

Strong (exogenous) Heat damages Yin fluids and nutritive blood (see Volume 1, Part I, Chapter 5, [Section 1, Subsection I, Sub-subsection 2](#)). This causes the liver meridian to lose their nourishment and moisture and disrupts the mobility of the joints and muscles. The damaged Yin permits liver-Yang to rise without restraint and transform into Wind.

Clinically, there are two groups of symptoms. Those due to Wind are convulsion, spasm, nasal flaring, and rolling up of the eyes. Those due to Heat disturbing the mind are high fever, delirium and coma.

### **iii Yin Deficiency Stirring Wind**

Yin fluids may be damaged rapidly by blazing Heat or imperceptibly over a long period. In either case, the Yin fluids become depleted, even exhausted, and can no longer nourish the sinews or meridians. In such conditions, Wind can also rise.

Again, there are two groups of symptoms. Those due to Wind are twitching of the tendons and muscles and tremors of the hands and feet. Those due to Yin deficiency are rampant fever, hotness in the five centers, emaciation, night sweats, a tender and red tongue with a thin coating, and a thread-like, rapid but forceless pulse.

### **iv Blood Deficiency Generating Wind**

This condition occurs mostly in situations of inadequate blood formation, heavy loss of blood or chronic illness wearing out nutritive blood. In any case, liver-blood becomes insufficient and fails to nourish the sinews.

Clinically, there are symptoms of Wind such as numbness of the limbs or trunk, twitching of the muscles, or spasms in severe cases. There are symptoms of blood deficiency such as pale and lusterless complexion, lips and nails, dizziness, blurred vision, a pale tongue, and a thread-like and feeble pulse.

## 2 *Endogenous Cold*

Endogenous Cold arises within the body when the functions of the *zang-fu* viscera are inhibited, or have declined, or the Yin-Cold evil permeates the body as a result of decline of Yang-Qi and loss of its warming and transforming actions. This situation is mainly due to insufficient endowment of innate constitution, or inadequate acquired nutrition, or sustained depletion of Yang-Qi in a chronic illness. Whichever the cause may be, Yang becomes deficient and Yin excessive. Thus, endogenous Cold is also known as “internally generated deficiency Cold.” Clinically, endogenous Cold presents in one of two ways.

### i **Yang Decline and Yin Ascendancy**

Excessive Yin induces internal coldness and decline of Yang-Qi of the internal organs. This in turn leads to failure to warm the blood vessels, the interstitial spaces, the sinews and the muscles. Clinically, the symptoms are those of “contraction-tautness,” such as a pallid complexion, aversion to cold and desire for warmth, lying in a curled (fetal) position, and cold body and limbs. Alternately, all the limbs are cold, there is no sweating, or there is circumscribed local pain and cold.

The pathological changes of endogenous Cold are mainly related to the deficiency of spleen-Yang and kidney-Yang. For kidney-Yang is the root of the entire body’s Yang-Qi, and supplies warmth to all the visceral organs and body structures. When spleen and kidney Yang is deficient and its warming action missing, it is especially easy for deficiency Cold to appear. In this process the decline of kidney-Yang is the key. Thus, the *Plain Questions* states: “All Cold syndromes are marked by contraction- tautness, and they all belong to the kidney.”

### ii **Debility of Yang-Qi**

Debility of Yang-Qi compromises Qi transformation and causes the failure to restrain Yin. The metabolic processes are, in turn, impeded or stopped. The products of Yin-Cold then accumulate, leading to Dampness, Phlegm and Rheum. The symptoms are usually polyuria of clear urine, thin and clear saliva and nasal discharge, or watery diarrhea, or edema.

### 3 *Endogenous Dampness*

Decline or loss of transportation, transformation and distribution by the spleen often results in disturbed water and fluid metabolism. This in turn leads to retention of water and fluids. Since the retained water and fluids are not dispersed efficiently, they transform variously into Dampness, Phlegm or Rheum. This situation arises mostly because of spleen deficiency due to chronic illness or stomach injury due to excessive ingestion of foods that are raw and cold or fatty and sweet.

The key defect leading to this abnormal state is the failure of water transportation and transformation by the spleen. Hence the *Plain Questions* states, “The many Dampness disorders are characterized by swelling and fullness. They are all related to the spleen.”

Dampness is characteristically heavy, turbid, viscous and static. It readily blocks Qi movement, though the effects vary in accordance with its location. If Dampness is in the upper-*jiao* there are chest tightness and cough; in the middle-*jiao* epigastric and abdominal distention, poor appetite and a thick and greasy tongue coating; and in the lower-*jiao* abdominal distention, diarrhea and dysuria. If Dampness is in the skin and in the interstitial spaces of the muscles there is edema. It should be pointed out that though turbid Dampness can encumber every part of the body, it is the spleen and the stomach in the middle-*jiao* that are most often affected.

In addition, though there are differences between exogenous and endogenous Dampness the two often influence each other. When the external Dampness pathogenic evil attacks it often injures the spleen and compromises spleen functions. Loss of transportation and transformation by the spleen, in turn, leads to accumulation of endogenous turbid Dampness. Hence, in clinical practice whenever the spleen's functions are diminished the susceptibility to exogenous Dampness is increased.

### 4 *Endogenous Dryness*

When body fluids are insufficient all the organs, tissues and orifices of the body lose their moisture and nourishment. This in turn leads to the pathological changes of dehydration. That is to say, “impairment of body fluids turns into Dryness.”

There are many causes for this condition. Prolonged illness can damage Yin and exhaust Yin-fluid. Profuse sweating, severe vomiting or diarrhea, and massive loss of blood or essence can all diminish Yin and fluids. In other illnesses, the Heat evil can injure Yin or the Dampness evil can transform into Dryness. The insufficient body fluids cannot adequately nourish the *zang-fu* viscera or moisten the interstitial spaces of the superficies and orifices, thus producing the pathological changes of the endogenous Dryness syndrome.

The clinical manifestations of fluid depletion include dry and rough skin, sometimes with scaling, chapped mucous membranes, dry mouth and throat, dry or denuded, cracked and red tongue, dry nose and eyes, brittle nails, constipation, scanty dark urine, dry cough without sputum or blood-streaked sputum.

## **5 *Endogenous Fire***

Endogenous Fire is generated when Yang is over-abundant, or Yin is deficient and Yang hyperactive, or Qi and blood are chronically stagnant, or external pathogenic evils accumulate in the body and transform into Fire. The main types are discussed below.

### **i Overabundant Yang Transforming into Fire**

In normal conditions the body's Yang-Qi acts to nourish vitality, warm the viscera and tissues and keep the sinews supple. When it is overabundant, however, it stimulates over-activity of the metabolic processes and markedly increases the consumption of nutritive substances. In CM this is a situation of "excess of Qi is Fire."

### **ii Accumulated Evils Transforming into Fire**

This category includes two types of pathological processes.

In the course of externally caused diseases each of the external pathogenic evils is capable, under certain conditions, of accumulating in the body and transforming into Heat or Fire. This is so even with Yin evils, such as Cold or Dampness. This is known as "the five Qi transforming into Fire."

The other type includes a miscellaneous group of conditions. Food retention, parasitic infestation, and certain pathological products of metabolism, such as static blood, Phlegm and Rheum, all can transform into Fire.

### **iii Passions Transforming into Fire**

Also known as "the Fire of the five passions," this generally refers to situations of mental or emotional shock affecting the equilibrium of the body's Yin–Yang, Qi-blood and the viscera. Loss of this equilibrium causes bottling up of Qi. Prolonged bottling up of Qi leads to heat in a person with a Yang constitution, and from that Fire can arise.

For example, mental depression often causes stagnation of liver-Qi and the trapped Qi can transform into Fire. This is liver-Fire.

### **iv Yin Deficiency Generating Heat**

Deficiency of essence and blood causes damage to Yin fluids. Yin significantly deficiency in turn permits Yang hyperactivity, hence deficiency heat and deficiency Fire.

Clinically there is a difference between internal heat in Yin deficiency and blazing Fire in Yin deficiency. In general, symptoms of the internal heat in Yin deficiency

are systemic, such as hotness in the five centers, rampant fever, night sweat, insomnia, excessive dreaming, and a red tongue with little coating. Fire blazing in Yin deficiency, on the other hand, tends to be expressed in a specific localized area of the body, for example, toothache, sore throat, inflamed eyes, tinnitus, or dry mouth and lips.

## **Guidance for Study**

### **I Aim of Study**

This chapter discusses the concept, main contents and methodology in the study of etiology in CM.

### **II Objectives of Study**

After completing this chapter, the learners will be able to:

1. Master the methodology for studying etiology in CM;
2. Master the characteristics of the six climatic pathogenic evils, the external evils and the pestilential evils;
3. Know the pathological effects of the seven passions, imbalance between work and rest, and inappropriate diet;
4. Master the concepts of Phlegm, Rheum, and blood stasis, and their causes;
5. Understand the concept of endogenous pathogenic evils and their mechanisms and characteristics;
6. Know the pathological characteristics of traumatic injuries, burns and scalds, frostbite, and bites by insects and beasts.

### **III Exercises for Review**

1. What is the cause of a illness? How do you understand the causes of illnesses in CM?
2. What is the significance of the six climatic pathogenic evils? What are their common features?
3. Contrast Wind and Dampness, Cold and Fire. What are their characteristics?
4. What is meant by “passion causing internal damage?” What are the pathological characteristics?
5. In what ways can diet cause injury? How do unbalanced preferences cause illness?

6. Describe the balance between labor and rest. How do you define excessive rest? How can rest produce illness?
7. What is Phlegm? How are Phlegm and Rheum formed? What are the differences between them in pathology?
8. How are blood stasis produced? What are their pathological characteristics?
9. How are stones formed in the body? What characterize their pathological courses?
10. What is meant by the five endogenous pathogenic evils? How are they produced? What are their pathological features?

## Chapter 6

# Pathology in Chinese Medicine

Pathology is the study of the structural and functional abnormalities of the diseased body, from the onset through the course of development to the resolution of the illness. It was first mentioned in the *Internal Classic*. The *Plain Questions* states: “Carefully observe the suitability of the weather. Do not lose sight of the mechanism of the illness.” Again: “Search diligently for the disease mechanism, and treat it accordingly.” The “nineteen items on illness pathogenesis” in the *Internal Classic* are precisely a summary of clinical practice. These quotes point to the importance the ancient physicians attached to the study of pathology.

In CM the occurrence and course of development of a illness are closely related to the patient’s constitution and the characteristics of the causative evils. When the pathogenic evil attacks the body the body’s genuine (primordial) Qi resists it. The struggle disrupts the normal balance between Yin and Yang, and this disturbance in turn affects the physiological activities of all the organ and tissue systems of the body. In some cases the ascent and descent of organ Qi become abnormal, and in other cases the actions of visceral Qi and blood become ineffective – in all cases a variety of abnormal changes ensue, whether in the entire body or in a localized region.

The study and application of pathology and the mastery of the many changes in the course of illnesses are of crucial importance for the diagnosis, treatment and prevention of diseases. In CM the most characteristic feature in the clinical approach to illness is “treatment based on symptom analysis and pattern-recognition” which requires not only a systematic symptom analysis and differentiation of the pattern of disease in each individual patient but also the identification of the cause of the illness and its location and guides the ascertainment of its course and abnormal changes. Only then does the physician apply treatment aimed at the root of the illness. This is known as “in treatment seek the root.”

### Section 1 Pathogenesis

Pathogenesis is that part of pathology concerned with the study of the mechanisms and principles of the occurrence of illnesses.

## **I Relationship between the Genuine Qi and the Evil Qi to Pathogenesis**

Genuine Qi is the body's capacity for avoiding and resisting illness and recovery, as well as the normal functional activities. Evil Qi, used as the opposite of genuine Qi, is the general term for all the pathogenic factors that can harm the body, such as the six climatic evils, the seven passions, the pestilential evils, Phlegm, blood stasis and food retention. In CM the occurrence of any illness is a reflection of the failure of genuine Qi to repel evil Qi in their struggle. The relative rise and fall of genuine Qi and evil Qi not only directly affect the occurrence, development and prognosis of an illness but also determine the nature of the disease. In a sense, the course of the illness is the course of the rise and fall of genuine Qi and evil Qi.

### ***1 Deficiency of Genuine Qi Is the Basis of Pathogenesis***

In CM relative insufficiency of genuine Qi is the necessary internal condition that permits illness to occur, whereas evil Qi is the requirement for illness to develop. If there is sufficient genuine Qi, evil Qi cannot prevail; evil Qi can succeed only if genuine Qi is inadequate.

CM greatly emphasizes the body's genuine Qi. In general, when the body's visceral organ functions are normal and its Qi and blood are ample, then defensive Qi is sufficient to protect the body from invasion by exogenous evils or from illness caused by exogenous evils. In such conditions, the body's Yin, Yang, Qi, blood and the functions of the visceral organs and meridians are all within the parameters of the physiological state. This is known as "the genuine is able to repel the evil."

Conversely, if the body's genuine Qi is insufficient its capacity for resistance is weakened, and it is unable to repel evil Qi. Alternately, if the evil Qi is too powerful it can invade and establish itself in the face of normal genuine Qi. In either case, the body's Yin, Yang, Qi, blood, visceral organ and meridian functions move outside the physiological parameters. This is known as "the genuine is unable to defeat the evil."

### ***2 Evil Qi Is Required to Cause Disease***

Though greatly emphasizing genuine Qi and attributing to it the dominant influence in pathogenesis CM does not neglect the significance of the pathogenic evils. Being the necessary requirement for illness to occur the pathogenic evil may, under certain conditions, be the key factor. These conditions include, for example, high fever, chemical poisoning, trauma, and bites by animals or insects. In such situations, even though genuine Qi may be ample illness may be unavoidable. Already in ancient literature, for example the *Plain Questions*, there are clear statements that pestilential evils are contagious and that prevention of such contagion requires avoidance in addition to maintaining ample genuine Qi internally. This is especially true of those

more powerful pestilential evils, which can, under certain conditions, cause disease despite ample genuine Qi and even bring about epidemics.

## **II Internal and External Environment and Pathogenesis**

The condition of genuine Qi depends upon a number of factors, most importantly the constitution, the psychological state, the living environment, nutritional status and physical training.

### ***1 Constitution***

In general, the state of the body's constitution can be highly significant in determining whether a person becomes ill or not. Many people are exposed to the same pathogenic evils, yet some fall ill and many do not. Among those who do fall ill the severity and the course of illness vary because of differences in constitution. Thus, for example, when Wind and Cold invade the exterior of the body some patients may develop an "illness of exterior-deficiency due to Wind invasion" whereas others may develop an "illness of exterior-strength due to Cold injury."

In CM three factors principally contribute to a person's body constitution. Of these, the first and most important is heredity. The state of parental constitution to a large extent determines the state of the offspring's constitution.

The fatness or thinness of the body also influences the state of the person's constitution, and may affect the pathological changes of illness in the person. For example, a fat person tends to have relative deficiency of Yang; when such a person falls ill, the illness is more likely to be one of Dampness or Phlegm (which are Yin type of illnesses). Conversely, a thin person tends to have relative deficiency of Yin; when such a person falls ill the illness is more likely to be one of Fire or excess Qi. A person with a constitution of relative deficiency of Yang or abundance of Yin is likely to develop symptoms of Yin-Cold and to have pathologic changes of Cold illnesses. Conversely, a person with a constitution of relative deficiency of Yin or abundance of Yang is likely to develop symptoms of Yang-Heat and to have pathologic changes of Heat nature.

In addition, the state of constitution also varies with age. There is a definite correlation between age and illnesses. For example, a young child has a constitution of immature Yin or immature Yang. When Yang-Qi first begins to increase in childhood it tends to move readily. The child is more susceptible to Heat and Wind, and the body fluids are more easily injured. During the youthful years, the body tends to be stout and the constitution strong, so that Qi and blood are ample. When pathogenic evils attack there is a vigorous defense, so that most illnesses are those of evil strength and of Heat. In senescence, Qi and blood both decline, leading to relative deficiency of original Yin and Yang. When illnesses occur they tend to be of deficiency-Cold.

This discussion shows that the constitution is inseparable from pathogenesis and the course of illness.

## 2 *Psychological State*

The psychological state of a person strongly affects the sufficiency of genuine Qi; hence it is closely linked to the occurrence of illness. In general, a person with a mind at ease, harmony between Qi and blood, and ample genuine Qi is not susceptible to illness. Conversely, mental stress can severely disturb the functions of the *zang-fu* organs and reduce genuine Qi, so much so that pathogenic evils may invade easily to cause illness. A prolonged state of mental depression may lead to neglect of food and sleep, weakening of the constitution, hypo-function of the *zang-fu*-viscera, and impedance of the flow of Qi and blood, so that resistance becomes markedly reduced. This permits a variety of pathogenic evils to invade and cause illness. It is necessary to induce such a patient to build up confidence and develop a more optimistic outlook in order to enhance the capacity to resist and defeat illness. Only then can one reach the goal of expelling evil Qi and restoring genuine Qi.

Moreover, CM recognizes that different mental states are correlated with different patterns of illnesses. In general, an excited mental state is correlated with illnesses of strength, whereas a depressed mental state is correlated with illnesses of deficiency. In clinical practice a mixed pattern of deficiency and strength is also common. For example, prolonged mental stress can slowly wear down Yin-essence and allow liver-Yang to rise without opposition, or heart-Fire to blaze without restraint. This produces such symptoms as headache, dizziness, palpitation of the heart, and insomnia.

## 3 *Living Circumstances*

People form different patterns of habits in different living circumstances; hence a person's living circumstance also has definite effect on the susceptibility to illness. For example, people who live in a damp environment or work in water most easily develop diseases of Cold and Dampness. People who live in the mountains often develop goiter.

Moreover, CM believes that excessive reading damages blood, excessive lying about damages Qi, excessive sitting damages the flesh, excessive standing damages the bones, excessive walking damages sinews, excessive mental activity or brooding damages the heart and the spleen, and excessive physical exertion or labor damages the liver and the kidney.

It is clear that the living and working environment is significant in clinical diagnostics, especially in certain endemic or occupational illnesses.

## 4 *Nutrition and Sports*

Nutrition and sports are important factors in strengthening genuine Qi and in enhancing the ability to resist pathogenic evils. If nutrition is adequate and absorption effective then Qi and blood are sufficient, so that genuine Qi is ample and its capacity to repel illness is normal. If nutrition is inadequate or the diet is unbalanced by preferences then Qi and blood will inevitably decline, so that genuine Qi becomes insufficient and too weakened to repel pathogenic evils. The person then becomes more susceptible to illness.

Regular physical activity or sports is an important way to facilitate the circulation of Qi and blood, to strengthen the constitution, and to promote metabolism. Thus, it is said that “flowing water does not decay and the used door hinge does not rot.” Neglect of physical activity or sports, on the other hand, leads to impedance of Qi and blood movement, weakening of the sinews and bones and decline of genuine Qi, resulting in lowered resistance to illness.

## III Transmission of Illnesses

From its onset to its eradication a disease is a struggle between genuine Qi and evil Qi. In the course of this struggle many changes take place, and at each stage there may be a different pattern of activities of Yin–Yang, Qi and blood, and metabolism. This is true not only of exogenous illnesses but also of endogenous illnesses. The site of illness and the extent of involvement are different for different illnesses, or their constellations of symptoms. In general exogenous illnesses are analyzed by the Six Meridians (see Volume 1, Part II, Chapter 9, Section 4), the Four Levels (see Volume 1, Part II, Chapter 9, Section 5), or the *sanjiao*, whereas endogenous and miscellaneous diseases are analyzed by the visceral organs and their meridians.

Many factors influence the transmission and the development of an illness, for example, the rise and fall and changes in genuine Qi and evil Qi, the state of the body’s constitution, the geographic locale and changes in the weather, the living conditions and the methods of treatment. On the whole, there are three aspects to the transmission and development of illnesses, namely, transmission of site, transformation between Cold and Heat, and transformation between deficiency and strength. Site transmission is discussed in this section, whereas transformation of Cold-Heat and deficiency-strength will be discussed in [Section 2](#).

The site of illness is the location that is affected. Site transmission points to the fact that in its course an illness may shift from one site to another. CM believes that any disease may, via the meridians, shift between exterior and interior, or between upper and lower, or among the *zang-fu* organs.

## 1 Exterior–Interior Transmission

Exterior–interior transmission includes transmission of the pathogenic evil from the exterior of the body to its interior and transmission of an interior illness to the exterior.

Interior transmission of exterior illness is the process whereby the external pathogenic evil, after establishing itself in the exterior of the body, moves from the skin and hair by means of the meridians to the interior of the body, where it attacks the *zang–fu* organs and affects their functions. This is often seen in the initial and mid stages of the illness, and reflects its deepening and worsening.

Exterior transmission of interior illness is the process whereby disease in the internal organs moves, after the struggle between genuine and evil Qi, outward to the exterior of the body. Take measles for example. This illness characteristically shows high fever, restlessness, chest tightness, and other symptoms. Following treatment there is sweating, breaking of fever and eruption of a rash on the skin. This is the manifestation of the illness moving from the interior to the exterior.

The Four Levels of the warm diseases represents the usual transmission of illnesses of Heat. In general, the progression is from the Defensive Level to the Qi Level, then to the Nutritive Level, and finally to the Blood Level (see Volume 1, Part II, Chapter 9, Section 5). This progression reflects transmission from the exterior to the interior and deterioration of the patient.

## 2 Up–Down Transmission

External evils are of different natures. They often attack the body at different sites, some in the upper body and some in the lower body, and enter by different routes. Because the human body is an organic whole, though the sites of attack may be different the pathogenic evils can, by means of the meridians, transmit up or down. The *Plain Questions* states: “Yang illnesses tend to move upward until reaching the top, then turn around and move downward. Yin illnesses tend to move downward until reaching the bottom, then turn around and move upward. Hence, in illnesses of Wind the upper body is affected first; and in illnesses of Dampness the lower body is affected first.”

Transmission by the *sanjiao* is one of up–down transmission by means of the upper, the middle and the lower *jiao*. For example, exogenous Heat illnesses, especially those of Heat–Dampness, generally transmit sequentially from the upper-*jiao* to the middle-*jiao* to the lower-*jiao*.

## 3 Transmission Among Zang–Fu Viscera

The body is an organic whole, and the *zang–fu* viscera are its most important organ systems. The principal modes of transmission here are those from *zang* to *zang*,

between a *zang* organ and its dyadic *fu* organ by exterior–interior transmission, and from *fu* to *fu*.

### i Zang–Zang Transmission

This kind of transmission is from one *zang* organ to another. The sequence of such transmissions is determined by the theory of the Five Elements (see Volume 1, Part I, Chapter 1, [Section 2, Subsection III](#)).

**Transmission by Over-Restraining or Counter-Restraining.** Transmission of illnesses from the heart to the lung, from the lung to the liver, from the liver to the spleen, from the spleen to the kidney, and from the kidney to the heart – these are all of this kind. In each case, the transmission reflects the worsening of the patient’s condition. The most common of these situations is rage damaging the liver and inducing diarrhea, known as “liver-Wood over-restraining spleen-Earth.”

**Transmission between Mother and Son.** This is transmission through the relationship of generation between two Elements. If the mother organ is ill, the illness of the mother organ will be passed to the son organ. For example, consider the liver and the kidney. Deficient kidney-Yin cannot moisten liver-Wood; therefore deficiency of kidney-Yin leads to liver-Yin deficiency. There is also the situation in which the son steals the mother’s Qi. Thus, deficiency of liver-Yin can induce insufficiency of kidney-Yin. In general, transmission from the son to the mother represents a more severe illness than transmission from the mother to the son.

### ii Zang–Fu Transmission

This situation usually takes place between a *zang* organ and its dyadic *fu* organ. For example, the heart and the small intestine form a *zang–fu* dyad; heart-Fire can pass to the small intestine along the meridian. The spleen and the stomach form a dyad; spleen deficiency can induce stomach dysfunction. The lung and the large intestine form a dyad; impairment of the lung’s dispersion and depuration functions can disturb the functions of the large intestine. The kidney and the urinary bladder form a dyad; impairment of the Qi-forming function of the kidney can cause difficulty with urination by the bladder.

### iii Fu–Fu Transmission

Though each of the six *fu* organs has its own unique functions, they all participate in the metabolism of food and water – intake, decomposition, assimilation, transformation, distribution and discharge – and from beginning to end they maintain a dynamic fluctuation between fullness and emptiness. Thus, a disturbance in any one of them can affect the others. For example, blockage of the Qi of the large intestine by impairment of its conveyance function can cause abnormal upward flow

of stomach-Qi; this is manifested as hiccup, nausea, and vomiting. If Dampness and Heat accumulate in the stomach, the gallbladder is steamed and bile can flow outward abnormally, producing bitterness in the mouth and jaundice.

## Section 2 Mechanisms of Pathological Change

This section concerns the mechanisms and principles of pathological change following the beginning of illness. Their mastery will provide effective guidance to the physician in gaining a deeper understanding of the courses of illnesses and in carrying out symptom analysis and pattern recognition as well as in formulating treatment.

The human body is an integrated whole composed of a number of internal and other organs and many tissues. In physiological functions each organ is interconnected to the others, and in pathological changes each affects the others. Clinically, illnesses are large in number and varied in nature, and their pathological changes are very complicated. Different illnesses cause different symptoms, and each has its own pathological mechanisms. Nevertheless, though the symptoms caused by these many different illnesses are bewilderingly numerous there are certain shared regularities and patterns.

In CM the fundamental response of the human body to the variety of illnesses comprises the following four aspects: relative rise and fall of evil Qi and genuine Qi; imbalance of Yin–Yang; disturbance of Qi and blood; and abnormal metabolism of body fluids.

### I Rise and Fall of Evil Qi and Genuine Qi

In the course of illness the body's genuine Qi struggles against the pathogenic causing evil Qi. The rise and fall of evil Qi and genuine Qi concern the relative fortunes of these two forces in this struggle. This struggle directly bears upon not only the pathological changes but also the course of development and outcome of the illness.

#### 1 *Deficiency and Strength*

There are two basic patterns of pathological changes in the course of an illness – strength and deficiency. Thus, the *Plain Questions* states: “Abundance of evil Qi is strength; decline of essential Qi is deficiency.”

Here “strength” means mainly the abundance of evil Qi. In the conflict that is taking place in the body evil Qi and the body's capacity for resistance are both strong. Because of the visceral organs' vigor or because genuine Qi is not yet injured despite the strength of evil Qi, the body is still able to fight vigorously. For this reason, the conflict is vigorous and is characterized clinically by prominent symptoms, such

as high fever, delirium, a loud voice, coarse respiration, abdominal pain aggravated by pressure, constipation and oliguria, and a replete and forceful pulse.

“Deficiency” means mainly the insufficiency of genuine Qi. This is seen principally as insufficiency of the body’s Qi, blood, fluids and material support of the organs and meridians, or decline of the physiological functions of the viscera. This is a state that often results from a severe or prolonged illness, as in, for example, weakening of genuine Qi by profuse sweating, severe vomiting or diarrhea, or massive blood loss. In this state the body is unable to mount a strong defense, so that clinically the symptoms tend to be weak, such as fatigue, lassitude, a wan appearance, palpitation of the heart, shortness of breath, spontaneous perspiration and night sweat. Or there is hotness in the five centers, or cold-aversion with cold limbs. The pulse is threadlike and weak.

It must be pointed out that in determining strength versus deficiency there are definite indicators; but clinical symptoms are only the manifestations of the illness. In general, the symptoms correspond with the nature of the illness, and strength or deficiency can be accurately determined. But in unusual conditions the symptoms may not reflect the nature of the illness, giving rise to the phenomenon of false manifestation; and such false manifestation cannot accurately reflect the true state of the struggle between evil Qi and genuine Qi. Consequently, there are the pathological changes of “true strength, false deficiency” and “true deficiency, false strength.” “True strength, false deficiency” is the pathological state in which a strong disease evil accumulates and obstructs the meridians and the actions of Qi, impeding the flow of Qi and blood and their distribution. “True deficiency, false strength” is the pathological state in which the primary mechanism of illness is insufficiency of Qi and blood, so that there is not sufficient motive force for transportation and transformation. This further reduces or blocks the functions of the viscera. These situations give rise to what the ancients called “symptoms of deficiency in extreme strength” and “symptoms of strength in extreme deficiency.”

Hence, in clinical analysis of illnesses it is necessary to move beyond the symptoms and to grasp the true nature of the illness – by grasping the rise and fall of evil Qi and genuine Qi through the course of changes of strength and deficiency.

## ***2 Progression and Outcome of Illness***

In the course of the onset and development of illness, the rise and fall of evil Qi and genuine Qi are not fixed and unchanging, but dynamic. These changes not only determine the pathological changes of strength and deficiency, but also directly impact the progression and outcome of the illness. The following are the main patterns.

### **i Evil Qi Retreats as Genuine Qi Prevails**

In the course of illness as genuine Qi rises it succeeds in overcoming evil Qi. This is reflected by convalescence and recovery, and is perhaps the most common outcome.

For example, in illnesses caused by external climatic evils, evil Qi usually attacks through the skin and hair or by the mouth and nose. If the body's genuine Qi is sufficiently full and its ability to repel pathogenic evil is sufficiently strong, then it not only can slow the progression of illness and limit the illness to the superficialities but also can expel the pathogenic evil. Once there is diaphoresis and release of the exterior then evil Qi is eliminated and defensive Qi and nutritive Qi again act in harmony, and the illness resolves.

## ii Prevalence of Evil Qi Damages Genuine Qi

This is the path of deterioration, even death. Such a progression reflects either severe deficiency of genuine Qi or overpowering strength of evil Qi, so that the body's capacity for resistance is progressively diminished and can no longer effectively contain evil Qi or prevent its advance. The damage to the bodily functions becomes progressively more severe, and the patient's condition deteriorates inexorably.

This situation is known as "deficiency resulting from strength." For example, in exogenous Heat illnesses, when Yin collapse or Yang collapse occurs then clearly genuine Qi is unable to defeat evil Qi. This is the typical course of ascendant evil Qi overcoming genuine Qi.

## iii Deficient Genuine Qi Unable to Eliminate Evil Qi

If genuine Qi is unable to expel evil Qi but is sufficiently strong to prevent its further advance, the illness evolves into a state of stalemate in which the evil Qi persists in the body but is contained. A different state evolves if evil Qi has been overcome but genuine Qi is so weakened that evil Qi persists in a mutated form. In both cases, the illness has moved from being acute to being chronic or to a state of residual illness.

# II Imbalance of Yin–Yang

The relationship between Yin and Yang is complex. In addition to mutual opposition and restraint, there is also mutual dependence and support. Moreover, under certain conditions one can transform into the other. For the body to remain in a normal physiological state, it is necessary for Yin and Yang to be in dynamic equilibrium (see Volume 1, Part I, Chapter 1, [Section 2](#), [Subsection II](#)).

In the course of an illness various processes can disturb the normal dynamic equilibrium between Yin and Yang. This can lead to relative excess or deficiency of Yin or Yang, inability of one to restrain the other, mutual injury to both, mutual repellency, or depletion. This is paralleled by disharmony among the functions of the *zang-fu* viscera and the meridians, among the actions of Qi and blood, and between the ascent–descent and entering–exiting of Qi. The main patterns of imbalance of Yin–Yang are as follows.

## ***1 Yin or Yang Excess***

Excess of either Yin or Yang is a case of “excess evil Qi becomes strength.” When a pathogenic evil invades the human body, it seeks out its kind; that is, a Yang evil seeks out and augments Yang-Qi of the body, making Yang excessive, whereas a Yin evil seeks out and augments Yin-Qi of the body, making Yin excessive. Thus, the *Plain Questions* states: “Excess of Yang leads to Heat, and excess of Yin leads to Cold.” This clearly points out the pathological mechanism of Yang or Yin excess, and its characteristic clinical manifestation as strength-Cold or strength-Heat.

### **i Excess of Yang**

Yang excess is a pathological state in which Yang-Qi is excessive, the body’s functions are overly active, metabolism is accelerated, the person is overly excitable, and there is excess heat. In general, this pathological state is characteristic of the illnesses of strength-Heat with excess Yang but not deficient Yin.

Four main types of situations lead to such Yang excess diseases. They may be due to invasion by external pathogenic evils of the Yang type, or by external evils of Yin type which upon entering the body become transformed into Yang. They may result from internal injury by the five passions, or by stagnation of Qi, stasis of blood, or retention of food – these can all transform into Fire when extreme.

The dictum “if Yang is excessive there is Heat” indicates that the pathological change of transformation into Heat or Fire is very common in an illness of Yang excess, so that such a state frequently presents as an illness of strength-Heat. This is because Yang has the characteristics of warmth, motion and dryness. A condition of Yang excess easily produces symptoms of Heat, such as high fever, flushing of the face and inflamed eyes. This is known as “Yang excess leads to Heat in the exterior.”

Moreover, long-standing Yang excess necessarily consumes Yin-fluids. This leads to insufficiency of body fluids and reduction of Yin-essence, which will also transform into strength-Heat and Yin-essence deficiency. This is known as “ascendancy of Yang leads to Yin illness.”

### **ii Excess of Yin**

Yin excess is a pathological state in which Yin-Qi is excessive, the body’s functions are hypo-active, metabolism is depressed, the person is overly passive, there is insufficient generation of warmth, and there is accumulation of products of pathological changes. In general, this pathological state is characteristic of illnesses of strength-Cold with excess Yin but not deficient Yang.

Three main types of situations lead to such Yin excess illnesses. There may be attack by Yin type of external pathogenic evil (Cold or Dampness). There may be overeating of raw and cold foods and drinks, which produce excess Yin. The coldness bottles up internal Yang and depresses the ability of Yang-Qi to produce the

necessary warmth. There may be a chronic deficiency of Yang-Qi, so that the body is unable to warm and transform Yin-fluids. This leads to strength of internal Yin-Cold. The first two are conditions of strength, whereas the last is a mixed condition of strength and deficiency.

The dictum “if Yin is excessive there is Cold” indicates that this type of excessive Yin is likely to lead to depression of the functions of the viscera and tissues and of the warming and transforming actions of Qi. As a result, there are excessive Yin-Cold internally, sluggish blood circulation, and retention of Phlegm, Dampness and fluids. This is because Yin has the characteristics of coldness, quietude and dampness. A condition of Yin excess easily produces symptoms of Cold, such as cold torso and limbs, a pale tongue, abdominal pain, diarrhea, edema and Phlegm and Rheum. This is known as “Yin excess leads to coldness in the interior.”

Moreover, long-standing Yin excess necessarily injures Yang-Qi. Hence, the transformation of Yin excess to strength-Cold is often accompanied by a general depression of physiological activities or debilitation – effects of Yang deficiency. This is known as “ascendancy of Yin leads to Yang illness.”

## 2 Yin or Yang Deficiency

Deficiency of either Yin or Yang is principally manifested as “loss of essential Qi leads to deficiency.” “Loss of the essential Qi” actually encompasses the insufficiency of essence, Qi, blood and fluids, and at the same time decline in the physiological functions of the *zang-fu* viscera, the meridians and the other organs. All these can be grouped in the two categories of Yin and Yang.

### i Yang Deficiency

In the pathological state of Yang-Qi deficiency the functional capacity of the viscera declines, their responsiveness weakens, and metabolism and heat production diminish. In general, these pathological changes reflect the inability of weakened Yang to restrain Yin, thus giving rise to a disease of deficiency Cold. This is known as “Yang deficiency leading to Cold in the exterior.”

A number of situations can give rise to the condition of Yang deficiency. There may be inadequate prenatal endowment, postnatal malnutrition, internal injury from fatigue and exhaustion, or damage to Yang-Qi by prolonged illness.

In general, in Yang-Qi deficiency the most important factor is deficiency of kidney-Yang and spleen-Yang, especially the Vital Gate Fire component of kidney-Yang. This is because kidney-Yang is the root of Yang of the entire body. Because Yang-Qi is impaired the warming and transforming actions of Qi are weak, and blood and body fluids circulate sluggishly. Failure of Yang to transform Yin causes fluid retention. Failure of Yang to restrain Yin permits Yin-Cold to prevail. Thus, in illnesses of Yang deficiency the symptoms include a pallid complexion,

cold-aversion with cold limbs, a pale tongue and a slow pulse; other symptoms include somnolence, polyuria of clear urine, diarrhea containing undigested food, and increased susceptibility to exposure. In severe cases, water metabolism is disturbed, and there may be fluid retention, oliguria and edema.

## ii Yin Deficiency

In Yin deficiency there is insufficiency of essence, blood or fluids. At the same time, because deficient Yin cannot restrain Yang there is relative Yang excess and false hyperactivity of the organ systems. This is known as “Yin deficiency leads to Heat in the interior.” In general, the characteristic pathological changes are insufficiency of Yin-fluids, reduced nourishment, and inability to be calm, as well as symptoms of deficiency-Heat.

Yin deficiency is mostly due to Heat illnesses injuring body fluids, or extreme passions transforming into Fire and injuring Yin, or chronic illnesses damaging Yin-fluids.

In general, in Yin-fluid deficiency the most important factor is deficiency of lung-Yin, liver-Yin and kidney-Yin, especially kidney-Yin. This is because kidney-Yin is the source of Yin of the entire body. Because reduced Yin-fluids cannot restrain Yang-Qi, many pathological changes can occur, such as Heat in the interior due to Yin deficiency, blazing Fire in Yin deficiency, and over-activity of Yang due to Yin deficiency. Heat in the interior due to Yin deficiency is marked by hotness in the five centers, very high fever, emaciation, night sweats, a dry mouth, a red tongue and a threadlike, rapid and feeble pulse. Blazing Fire in Yin deficiency and overactive Yang in Yin deficiency are marked by similar symptoms. These are high fever, night sweats, hotness in the five centers, malar flush, hemoptysis, emaciation; or insomnia; or seminal emission; or increase in sexual libido; dry mouth and throat, red and dry tongue, and a threadlike and rapid pulse; or lumbar and knee aches, dizziness, agitation and irascibility.

## 3 *Mutual Injury to Yin and Yang*

In their complex interaction over-consumption of either Yin or Yang can, under certain conditions, lead to insufficiency of its opposite; this may result in deficiency of both Yin and Yang. There are two basic patterns: when Yin deficiency induces Yang deficiency it is known as “Yin injury extending to Yang”; and when Yang deficiency induces Yin deficiency it is known as “Yang injury extending to Yin.”

It should be pointed out that the kidney stores essence and Qi and contains both primordial Yin and primordial Yang. It is the source of Yang-Qi and Yin-fluids for the entire body. Because of this it is when Yin–Yang of the kidney is not in harmony that either Yin injury extending to Yang or Yang injury extending to Yin is likely to happen.

### **i Yin Deficiency Extending to Yang**

When Yin-essence is reduced the production of Yang-Qi is reduced, or Yang-Qi loses its carrier and dissipates. In either case, Yin deficiency can lead to Yang deficiency as well, so that both Yin and Yang are injured.

For example, in the clinically common condition of liver-Yang ascending abnormally the basic pathological process is the Water Element (kidney) failing to nourish the Wood Element (liver), so that Yin is deficient and Yang is overactive. But as the illness progresses, the kidney's essential Qi becomes affected, and in turn kidney-Yang is reduced. In addition to the symptoms of Yin deficiency (see Subsection 2ii, above), there are cold-aversion with cold limbs, a pallid complexion and a deep and feeble pulse.

### **ii Yang Deficiency Extending to Yin**

When Yang-Qi is deficient there is not sufficient energy for Yin to transform. Over time this results in deficiency of Yin-fluids, that is, Yang deficiency extending to Yin, so that both Yang and Yin are injured.

For example, deficiency of kidney-Yang causes the kidney to fail in its Qi-transforming function. As a result the metabolism of fluids is impaired, causing accumulation of water and Dampness and edema. As the condition progresses, Yin cannot be transformed from Yang.

Similarly, deficient kidney-Yang fails to perform the transforming function of Qi, so that fluid metabolism is impaired, leading to internal accumulation of Water-Dampness and marked edema. However, if the condition progresses Yin becomes progressively deficient because it has lost its source in the deficient Yang. In addition to the symptoms of Yang deficiency (see Subsection 2i, above), there are now emaciation, agitation and convulsions.

## **4 Mutual Repellency of Yin and Yang**

Among the conditions of imbalance of Yin–Yang mutual repellency is distinctive. There are two varieties: excessive Yin repelling Yang and excessive Yang repelling Yin. The principal cause of this repellency is extreme excess of one causing blockage and exclusion of the other, so that all relationship between two is severed. Clinically this has two complex patterns of manifestation: true Cold with false Heat, and true Heat with false Cold.

### **i Excessive Yin Repelling Yang**

There are two patterns. In one, excessive Yin occupies the interior and repels Yang to the exterior. Since Yang is alone in the exterior clinically there are Heat-type

symptoms in the exterior, such as fever, flushed complexion, thirst and a large pulse. Because the basic pathology is Yin-Cold excess in the interior, which forces Yang to the exterior, this is a case of true Cold and false Heat. (For the true Yin symptoms see Subsection 1ii, above.)

In the other pattern, excessive Yin occupies the lower half of the body and repels Yang to the upper half. Clinically this usually presents true Cold symptoms in the lower body and false Heat symptoms in the upper.

## **ii Excessive Yang Repelling Yin**

In this case excessive Yang occupies the interior of the body and repels Yin to the exterior. Clinically, in addition to internal Heat symptoms (see Subsection 1i, above) there are Cold-type symptoms in the exterior, such as cold limbs and a sunken pulse. Because the basic pathology is Yang-Heat excess in the interior, which forces Yin to the exterior, this is a case of true Heat and false Cold. It is also known as “paradoxical cold limbs due to Yang,” or “paradoxical cold limbs due to Heat.”

## **5 Depletion of Yang or Yin**

This is a very serious condition in which Yin-fluid or Yang-Qi is abruptly depleted, leading to loss of their actions and consequent cessation of organic functions. There are two types: Yang depletion, and Yin depletion.

### **i Yang Depletion**

This is a serious condition in which Yang-Qi is suddenly lost, leading to severe failure of all functions of the body. In general, this arises mostly when evil Qi is so powerful that genuine Qi is routed in their struggle and collapses. Another cause is excessive fatigue and exhaustion occurring in a person already deficient in Yang-Qi. The condition can also arise when patients are incorrectly treated with excessive use of diaphoresis. Yang-Qi escapes the body along with the inappropriately profuse sweat, leading to sudden collapse of Yang-Qi. Finally, it may also appear in an advanced stage of chronic disease when deficient Yang floats and dissipates due to severe consumption of Yang-Qi.

Since Yang-Qi and Yin-fluid have a mutual relationship, depletion of Yang can lead to failure to produce Yin-fluid, which therefore also becomes exhausted. Depletion of Yang is thus usually followed by the exhaustion of Yin. Under such circumstances, once Yin becomes severed from Yang life comes to an end.

## **ii Yin Depletion**

This is a pathological state in which severe consumption or sudden loss of Yin-fluid leads to serious decline of systematic function in the entire body. The most common cause is strong Heat evil or chronic Heat evil in the body; in both cases there is large scale scorching of Yin-fluid. Another cause is massive hemorrhage, vomiting or diarrhea, or other disorders that rapidly consume Yin-fluid.

Yin depletion is also a very serious condition. At the time of Yin depletion there often are such symptoms of Yin-fluid collapse as labored breathing, agitation, warm hands and feet with greasy sweat, delirium or coma.

## **III Disturbance of Qi and Blood**

Disturbance of Qi and blood includes their insufficiency, impairment of their physiological actions, and disruption of their mutual dependence and interaction. As in the case of rise and fall of genuine Qi and evil Qi or imbalance of Yin–Yang, disturbance of Qi and blood is not only the underlying mechanism of certain illnesses but also the basis for clinical analysis. This group includes disturbance of Qi, disturbance of blood, and disharmony of Qi and blood.

### ***1 Disturbance of Qi***

Disturbance of Qi includes mainly the following two aspects. The first is deficient Qi caused by insufficient production or over-consumption of Qi. The second is sub-normality in certain actions of Qi and abnormal or chaotic flow of Qi, from which follow such abnormalities as stagnation of Qi, counter-flow of Qi, sinking of Qi, blockage of Qi or collapse of Qi.

#### **i Deficiency of Qi**

Qi deficiency is the pathological state in which primordial Qi is impaired, so that the functions of the viscera and meridians become weakened and resistance to illness lowered. The most common causes of this condition are inadequacy of innate endowment, postnatal malnutrition, excessive fatigue and exhaustion, chronic illness, and reduced function of the spleen, the lung and the kidney. All these lead to insufficient generation of Qi; and because of the intimate relationship between Qi and blood and between Qi and body fluids any deficiency of Qi will affect blood and fluids. The result is inadequate generation of blood and fluids, their slower circulation, or their loss.

Clinically, Qi deficiency is manifested by weakness in protecting against external agents, with a tendency to perspire; susceptibility to illness due to lack of defensive Qi; atrophy and weakness of the four limbs due to lack of nourishment; and dispirit-  
edness and vertigo due to failure of clear Yang to ascend.

## ii Disturbance of Qi Activity

This is a pathological condition in which failure in the movements of ascent, descent, exiting and entering of Qi has led to deregulation and abnormality in the functional activities of the entire body or of certain viscera. There are five main patterns.

**Qi Stagnation.** Stagnation of Qi results mainly from the passions being trapped internally, accumulation of Phlegm and Dampness, retention of food, or stasis of blood. Impedance of Qi flow, whether regional or total, in turn affects the functions of viscera and meridians. Regional meridian blockage of Qi movement often presents with pain and distention; in severe cases there may be stasis of blood, retention of fluid and accumulation of Phlegm. Because the ascending action of the liver, the descending action of the lung, the raising action by the spleen and the lowering action by the stomach are important in the regulation of Qi transformation, disturbance of the functions of these organs can lead to the abnormality of Qi stagnation. Examples include stagnation of lung-Qi, trapping of liver-Qi and impedance of spleen and stomach-Qi.

**Counter-Flow of Qi.** This is the pathological state in which Qi movement is disrupted and visceral Qi rises abnormally. It results mainly from the passions, or improper diet of cold or hot food and drinks, or blockage by accumulated turbid Phlegm. Counter-flow of Qi is most frequently seen in diseases affecting the lung, the stomach and the liver. For example, if the lung loses its depuration function and its Qi ascends, there may be coughing, hiccup and labored breathing. If stomach-Qi fails to descend but ascends instead there may be nausea and vomiting, or eructation and hiccup. If liver-Qi rises abnormally there may be pain and pressure in the head, flushing of the face, inflamed eyes and irascibility. If passions cause liver-Qi to surge upward or liver-Qi rises because of rage, then blood may rise with liver-Qi and lead to hemoptysis, hematemesis, or even fainting from blockage of the orifices.

Counter-flow occurs mainly in illnesses of strength, but sometimes can happen in illnesses of deficiency. For example, in deficiency of lung-Qi depuration fails and the kidney is unable to receive Qi can both cause lung-Qi to rise abnormally. Deficiency of stomach-Qi, hence the lowering function of the stomach, can also cause stomach-Qi to rise abnormally.

**Qi Sinking.** In this condition deficient Qi is too weak to ascend. Consequently, its ability to maintain the internal organs in their locations is also weakened, resulting in their ptosis or prolapse. This occurs most commonly as a complication of Qi deficiency. It can also occur in a patient with a weak constitution, a protracted illness or depletion of spleen-Qi, so that clear Yang cannot ascend and central Qi sinks. In this condition, there may be ptosis of the stomach or of the kidney, and prolapse

of the uterus or rectum. Symptoms include distention and heaviness in the waist and abdomen, diarrhea, frequent urination, shortness of breath and lassitude, and a feeble voice.

**Qi Blockage.** This is a condition in which turbid disease evil blocks the meridians or Qi has become trapped. As a result, the entering–exiting activities of Qi become completely blocked and the clear orifices closed, with consequent syncope or coma. Thus, sudden closure caused by turbid and unclear pathogens can precipitate syncope. In the course of an exogenous Heat disease extreme fever can also precipitate syncope. So can sudden mental trauma. These are all examples of obstruction of the exiting activity of Qi.

**Qi Collapse.** This is a condition of massive loss of Qi. It may result from genuine Qi being overwhelmed by evil Qi or genuine Qi remaining in a weakened state, so that Qi cannot be conserved in the interior but escapes outward and becomes dissipated. It may also result from massive bleeding, profuse sweating or other massive fluid loss, during which Qi escapes along with the blood or fluid. All these can lead to a sudden decline of all functional activities of the body. Thus, Qi collapse is the main mechanism of many kinds of functional collapse.

## ***2 Disturbance of Blood***

This condition has two main categories: insufficiency of blood, and disturbance of blood circulation. The latter comprises blood stasis (due to retarded blood flow), overheating of blood (leading to accelerated blood flow) and hemorrhage.

### **i Blood Insufficiency**

In this condition the volume of blood is insufficient. If blood is unable to provide adequate nourishment to the body, the pathological effects are similar to those of insufficient blood volume.

Reduction of blood volume may be caused by massive loss of blood without sufficient replenishment, or when deficiency of the spleen and stomach leads to malnutrition, so that these organs are unable to transform food essence into blood adequately. Blood insufficiency can also occur in cases of chronic consumption due to prolonged illness.

Reduced nourishment of organs and meridians by blood can cause reduction in their functions. Clinically, this is manifested by symptoms of deficiency, either regionally or systemically. Thus, there may be pallor and loss of luster of the complexion, the lips, the tongue and the nails. There may be dizziness or vertigo, sustained palpitation of the heart, and shortness of breath and weakness. There may be numbness of the hands and feet and stiff joints. There may be dryness and irritation of the eyes and blurred vision.

## **ii Blood Stasis**

This is a pathological condition of retarded or impeded blood circulation, or even gelling of blood. There are five main circumstances that produce blood stasis. Qi stagnation can cause obstruction of blood circulation. Qi deficiency can retard blood circulation. Accumulation of turbid Phlegm in the meridians can block the blood vessels. Invasion of blood by the Cold disease evil can induce gelling of blood. Invasion of blood by the Heat disease evil can in certain circumstances also induce stasis of blood. Once brought about, blood stasis can further impede the movement of Qi, so that Qi impedance and blood stasis enter into a vicious cycle of mutual aggravation.

Since impeded circulation is the main pathological mechanism underlying blood stasis, when static blood affects specific organs or regions of meridians it can cause blockage of meridians, with pain and swelling. At the same time, there may be darkening of the complexion, a dry and scaly skin, cyanotic lips and tongue, ecchymosis and telangiectasis.

## **iii Overheating of Blood**

In general, overheating of blood is a condition of Heat in the Blood Level of warm diseases (see Volume 1, Part II, Chapter 9, Section V), and can propel blood to circulate more rapidly than normal or cause blood to flow abnormally. This condition can come about in several ways, including exogenous Heat evil entering into blood and exogenous Cold evil invading the interior and transforming into Heat. The commonly seen progression of Heat illnesses into the Nutritive Level or Blood Level of warm illnesses belongs to this type of pathological change. Additional causes include mental depression, as well as the passions transforming into Fire and blazing endogenous Fire accumulating in the Blood Level.

Since warmth propels blood circulation, overheating of blood accelerates circulation. When there is Heat in the Blood Level, then the Yin-fluids are easily damaged. In severe cases, there may be bleeding. Hence, the pathological manifestation of the overheating of blood characteristically includes excessive consumption of blood, damage to Yin and hemorrhage, in addition to fever.

## **iv Hemorrhage**

Hemorrhage occurs mainly when the vessels are damaged or when Qi is deficient and unable to control blood flow. It can come about in several ways.

Mainly it occurs as a result of abnormal flow of Qi, scorching of the vessels by Fire, or traumatic injury to the vessels. Because the blood vessels reach every part of the body bleeding can occur at any place. The symptoms vary with the location of the hemorrhage. For example, injury to the lung can cause hemoptysis. Injury to the stomach vessels can cause hematemeses or melena. Injury to the large intestine

vessels can cause hematochezia. Injury to the bladder or urethra vessels can cause hematuria. Injury to the vessels associated with the Chong and Ren Meridians can cause metrorrhagia. Injury to the nose can cause epistaxis.

Hemorrhage can also occur when prolonged illness impairs spleen-Qi. This leads to failure of the spleen to control blood, which in turn allows blood to extravasate, as in subcutaneous hematoma, for example.

### ***3 Disharmony of Qi and Blood***

Since Qi and blood are interrelated by mutual dependence and mutual support, when the ascent–descent and exiting–entering of Qi are disturbed blood must be affected. Similarly, any abnormality of blood will affect Qi. The most important patterns of disharmony of Qi and blood are as follows.

#### **i Qi Stagnation and Blood Stasis**

When the movement of Qi is impeded and Qi stagnates, blood circulation is also impeded and blood becomes static. This is mainly due to the passions bottling Qi up internally.

Stagnation of Qi and stasis of blood are closely linked to disturbance of the liver's conducting and dispersing functions. Blockage of liver-Qi produces distention and pain in the chest and subcostal region. As Qi moves, so does blood. As Qi stagnates, so does blood. Thus, Qi stagnation and blood stasis often present clinically with pain, ecchymosis, masses and swellings.

Also, since the heart governs the blood vessels and propels blood circulation, when the heart's functions are disturbed blood stasis may develop and lead to Qi stagnation.

#### **ii Blood Stasis due to Qi Deficiency**

In this pathological state Qi deficiency first develops. Blood stasis results from deficient Qi being unable to propel blood circulation properly.

For example, if heart-Qi is deficient then blood circulation lacks adequate motive force and blood stasis may develop in the entire body. Clinically, there may be ecchymosis and cyanosis of the tongue. In the elderly, abrupt Qi deficiency may occur and lead to blood stasis, resulting in the body and limbs losing their nourishment; clinically, there may be hemiplegia.

In therapeutics, whatever its cause it is appropriate to treat the condition with large doses of herbs that augment Qi and complement them with herbs that mobilize blood and dissolve static blood.

### **iii Failure of Qi to Control Blood**

If the action of Qi to control blood flow is weakened, the flow of blood may not be contained within the vessels. This condition is closely linked to damage or deficiency of spleen-Qi. When deficient Qi fails to control blood flow there may be extravasation, resulting in subcutaneous bleeding and ecchymosis. If bleeding occurs in the lower parts of the body, it may be seen as hematochezia, hematuria, or in females metrorrhagia.

### **iv Qi Collapse Following Massive Bleeding**

Since blood is the carrier for Qi, when there is massive blood loss there is also massive Qi loss or collapse, resulting in deficiency or collapse of both Qi and blood. The main causes of this condition are traumatic hemorrhage, metrorrhagia and postpartum hemorrhage.

Qi collapse leads to prostration of Yang. Inability to warm the body and stabilize the exterior can produce profuse cold sweating. Inability of Yang-Qi to reach the extremities of the limbs can produce cold hands and feet. Collapse of both Qi and blood results in failure to nourish the head, the eyes and the orifices; this may produce syncope. Because of the collapse of blood the pulse is hollow, or it may be deep, threadlike and indistinct.

### **v Deficiency of Both Qi and Blood**

This is a condition of simultaneous deficiency and impaired actions of Qi and deficiency of blood with diminished nourishment of all the organ systems of the body. It is mainly the result of chronic illnesses in which Qi and blood are both consumed or damaged. In some cases there is loss of blood first, leading to reduction of Qi. In other cases there is Qi deficiency first, so that the sources of blood generation become compromised.

The clinical symptoms are of both Qi deficiency and blood insufficiency, such as a pallid or sallow complexion, shortness of breath with apathy, lassitude and weakness, emaciation, palpitation of the heart and insomnia, dehydration of the skin and numbness of the limbs.

## **IV Abnormal Metabolism of Body Fluids**

Abnormalities of fluid metabolism, whether regional or systemic, can disturb the production, distribution and excretion of fluids. The main pathological effects are insufficiency of fluids, mal-distribution and retention.

The complex processes of fluid metabolism require the transforming, ascending–descending and exiting–entering actions of Qi. Only when the transforming actions of Qi are vigorous can the production and excretion of fluids be normal. Only when the ascending–descending and exiting–entering actions of Qi are normal can fluids flow, rise and sink harmoniously and their absorption and excretion remain balanced. They also require the harmonious participation of many visceral organs, including the lung, the spleen, the kidney, the liver, the sanjiao and the bladder. The lung’s dispersing actions and the kidney’s transforming actions are especially important.

## ***1 Insufficiency of Body Fluids***

When the body fluids are insufficient quantitatively, the viscera, the exterior, the orifices all lose their moisture and nourishment. There are two groups of causes. One is damage by the Dryness and the Heat pathogenic evils. The other is loss due to profuse sweating, massive blood loss, vomiting or diarrhea, polyuria or excessive use of drying–warming herbs.

Insufficiency of fluids can produce such symptoms as dry throat, chapped lips, thirst, dehydrated skin, and withered hair. In more severe cases, there may be sunken eyes, reduced or absent sweating, oliguria and constipation.

## ***2 Impeded Distribution and Excretion of Body Fluids***

Though the two aspects of distribution and excretion are quite different, their abnormal functioning can induce retention of fluids and formation of Phlegm.

The transformation of fluids into sweat depends mainly upon the depuration function of the lung. The transformation of fluids into urine for excretion depends mainly upon the transforming action of kidney-Qi. Hence, disturbances of lung and kidney functions can all lead to retention of fluid within the body – sometimes suffused in the skin to produce edema, and sometimes among the organs.

In general, impedance of the distribution and excretion of fluids most often leads to blockage by viscid Dampness, retention of fluids, or accumulation of Phlegm and Rheum.

### **i Blockage by Viscid Dampness**

This is due principally to the loss of the transporting and transforming functions of the spleen, so that the distribution of fluids is impeded. The retained fluid accumulates and turns viscid. In this form it easily blocks the movement of Qi. This is

manifested clinically as chest tightness, nausea, abdominal distention, heaviness in the head and body, stickiness in the mouth without thirst, diarrhea with loose feces, a yellowish face, and edema.

## **ii Fluid Retention**

This usually occurs when the functions of the lung, the spleen and the stomach are compromised. If fluid is not transformed it remains in the body. If it stays in the skin, it appears as edema – regionally in the head, face, eyelids, the limbs, the abdomen or the back, or generalized (anasarca). If it accumulates in the abdominal cavity it appears as ascites, causing abdominal distention.

## **iii Accumulation and Phlegm and Rheum**

Both Phlegm and Rheum result from impairment of visceral functions, hence impedance of fluid metabolism. As a result, the fluids do not transform normally but accumulate as Rheum. Gelling turns Rheum into Phlegm. This can cause a variety of symptoms.

When Rheum causes illness, it has different names depending on where it accumulates. Rheum in the chest is known as “Suspended Rheum”; in the lung as “Sustained Rheum”; and in the limbs as “Overflowing Rheum.”

Phlegm ascends or descends with Qi and can reach every place in the body. It can affect different organs and meridians to produce a variety of illnesses and symptoms. For example, Phlegm in the lung can cause coughing that is productive of sputum. Phlegm in the heart can cause chest tightness, palpitation of the heart, mental confusion and delirium. Phlegm in the stomach can cause nausea, vomiting and discomfort in the epigastrium and abdomen. Phlegm in the meridians, sinews and bones can cause scrofula, subcutaneous nodules, numbness in the limbs, and sometimes hemiplegia, or carbuncles. Phlegm in the head and eyes cause obscuration of the orifices, with dizziness or syncope. Phlegm in the throat can cause globus hystericus.

## ***3 Disturbance of Relationship Among Fluids, Qi and Blood***

The relationship among fluids, Qi and blood is very close. Abnormality in any one can affect the other two and induce disharmony in their functions. The following are the principal pathological patterns.

### **i Retained Water Obstructing Qi**

This situation arises mostly because fluid metabolism has been disrupted, so that transformation by Qi is abnormal. As a result water is retained and diminishes the functions of the visceral organs. For example, Rheum in the lung causes blockage and bottling up of lung-Qi. Consequently the lung's depuration function is impaired and this leads to such symptoms as chest fullness, coughing and orthopnea (difficulty with breathing on lying down). Rheum in the heart obstructs the movement of heart-Qi and restrains heart-Yang. There may then be palpitation of the heart and cardiac pain.

### **ii Qi Collapse from Fluid Loss**

This condition is due to massive fluid or blood loss. Since fluid, like blood, is a carrier for Qi, there is massive escape of Qi, accompanied by Yang, along with the lost fluid. The most common causes of such massive fluid loss are high fever consuming the fluids, profuse sweating, and severe vomiting and diarrhea. Clinically, in addition to the massive loss of fluids or blood there may be shortness of breath, shallow respiration, cold limbs, and an indistinct and fading pulse. If this condition persists, separation of Yin and Yang may develop and death may ensue.

### **iii Drying of Blood from Depletion of Fluids**

This is a pathological state in which fluids are so depleted that blood becomes dry (that is, severely insufficient). As a result, endogenous deficiency-Heat or endogenous Wind is generated. The fluids are an important component of blood, and they have a common source in the acquired essence from drink and food. The principal causes of drying of blood due to fluid depletion are high fever or extensive traumatic burn massively consuming fluids, massive blood loss causing collapse of the fluids, or persistent Heat in Yin deficiency insidiously consuming fluids. The main symptoms are anxiety, dry nose and throat, hotness in the five centers, dry mouth with strong thirst, emaciation, oliguria, a red tongue with scanty saliva, and a threadlike and rapid pulse.

### **iv Blood Stasis due to Fluid Deficiency**

Plentiful fluids ensure fullness of blood vessels and smooth circulation of blood. If there is massive consumption of fluids, whether by high fever, traumatic burns, vomiting and diarrhea, or profuse sweating, the volume of blood is also markedly reduced and its circulation impeded. Under such conditions stasis of blood may develop. In addition to the symptoms of fluid deficiency, there may be cyanosis of the tongue, petechiae or ecchymosis in the skin, or other rashes.

## Guidance for Study

### I Aim of Study

This chapter aims to describe the basic concepts and principles of the pathogenesis and development of illnesses in CM. It provides more theoretical bases for the clinical diagnosis and treatment of illnesses.

### II Objectives of Study

After completing this chapter the learners will:

1. Master the basic pathogenesis of illnesses;
2. Know relevant factors that affect the occurrence of illnesses;
3. Master the rise and fall of evil Qi and genuine Qi, and the progression and outcome of illnesses;
4. Master the basic concept of imbalance of Yin–Yang, and the basic pathological mechanisms of relative excess, relative deficiency, mutual injury, mutual repulsion, mutual transformation and depletion of Yin and Yang;
5. Master the basic pathological mechanisms of Qi deficiency and disturbance of Qi activity;
6. Master the basic pathological mechanisms of blood deficiency, blood stasis, overheating of blood and hemorrhage, as well as disharmony in Qi-blood interaction;
7. Master the basic pathological mechanisms of insufficiency of body fluids, and disturbances in the distribution and excretion of fluids.

### III Exercises for Review

1. Why do illnesses occur? What are the characteristics of the pathogenic factors that cause illnesses?
2. What is the meaning of pathological mechanism? What are the main contents of the basic pathological mechanisms in CM?
3. How do the rise and fall of evil Qi and genuine Qi determine the occurrence of illness and pathological changes of deficiency and excess?
4. Describe concisely the pathological mechanisms of deficiency and strength and their clinical manifestation.
5. What is the meaning of imbalance of Yin–Yang? What are its main pathological changes?
6. What are the pathological mechanisms of relative excess and deficiency of Yin and Yang? Describe their respective clinical manifestations.

7. What are mutual impairment and mutual repellency of Yin and Yang? Explain their meanings and effects?
8. Explain Yin depletion and Yang depletion. What is the relationship between them?
9. Explain the disturbances of the functional activities of Qi. Describe concisely their pathological effects.
10. What are the main pathological effects and clinical manifestation of blood disturbances? Describe concisely their main characteristics.
11. What are the main pathologic effects and clinical manifestation of disturbances in the interaction of Qi and blood?
12. What factors can lead to the insufficiency of body fluids? Explain how the distribution and excretion of fluids can be disturbed, and the clinical significance of such disturbances.
13. What are the pathological effects of disturbances in the interaction between Qi and body fluids?
14. How do body fluids and blood affect each other in pathology? What are their pathological changes?

## **Chapter 7**

# **Approach to Chinese Medical Diagnosis**

In CM, diagnostics applies the methods of diagnosis to collect clinical information and, based on this information, to assess the state of health and the cause and status of illness of the patient. It is a discipline that comprises theories, methodology and skills, and has a rich content. It is fundamental to all branches of clinical CM.

In CM diagnosis depends upon the physician's ability to collect clinical information, to analyze and to infer logically, all without resorting to the use of any apparatus. It is possible to infer the pathological changes in the interior of the body from observation of external symptoms because the human body is an organic whole. All parts of the body are intimately and inseparably linked by the meridians. Because of this meridian system, certain pathological changes in an organ are always accompanied by tenderness in the organ's corresponding acupoints. Conversely, by finding the tender acupoints the physician can infer which organ is affected by illness.

## **Section 1 Diagnostic Approach in CM**

### **I Four Methods of Diagnosis**

CM diagnostics contains two major parts, the methods of diagnosis and differential diagnosis.

The principal goal of the methods of diagnosis is to elicit and gather clinical data on the state of the patient's condition and the symptoms manifested by the illness. There are four categories of methods of diagnosis: History, Inspection, Auscultation and Olfaction, and Palpation.

History is the process of determining the course of the patient's illness, from its onset to the time of consultation, by eliciting a narrative from the patient or companion and complementing it by further questioning. In addition to information about the symptoms, a proper history includes the patient's living habits and exposures, and the health and illnesses of family members, including the spouse, children and grandchildren if any, siblings if any, parents and grandparents.

Inspection means the visual observation of the patient's vitality, coloring, physical condition and behavior. It includes inspecting the tongue for its texture and coloring, and the secretions and excretions.

Auscultation focuses on the sounds made by the patient to infer the pathological changes within the body. These include spoken sounds as well as others, such as those of respiration and abdominal activities. Olfaction focuses on the odors emanating from the patient and excretions to infer the status of the patient.

Palpation of the pulse provides much information concerning the status of the visceral organs, Qi and blood. In addition, palpation of other areas of the body also provides useful information on the condition of the patient or special features of the illness.

The application of these methods is described in detail in Volume 1, Part II, Chapter 8.

## II Symptom Analysis and Differential Diagnosis

In any clinical encounter the physician collects by means of these four methods a profusion of clinical information concerning the patient. At the same time, there are many different illnesses and each illness can produce many different symptoms at each stage of its course. The task of moving from the clinical information to the actual or most likely disease affecting the patient can be daunting indeed, unless there is some way to organize and analyze these symptoms.

Symptom analysis is the first step in this process. It is the systematic assessment of the large amount of available information in order to extract reliable inferences concerning which symptom is genuine, which is false and which is fortuitous or extraneous, as well as the location of the pathological changes and the condition of the body.

Sometimes, after the process of symptom analysis, the identified pattern of symptoms points to several possibilities as to the cause and nature of the illness. Differential diagnosis is the next step. This is the systematic application of concepts, logic and judgment in an attempt to identify the actual cause, or at least the most likely, among these possibilities.

Thus symptom analysis and differential diagnosis are the basis for treatment in CM.

The most useful techniques for symptom analysis and differential diagnosis are: diagnosis by the Eight Fundamentals, analysis by Qi and blood, analysis according to the visceral organs, analysis by the Six Meridians, and analysis by the Four Levels.

The Eight Fundamentals fall into four pairs of opposites: Exterior–Interior, Deficiency–Strength, Cold–Heat, and Yin–Yang. CM uses these eight categories to understand and ascertain the location, the nature and the relative rise and fall of genuine Qi and evil Qi. This categorization is fundamental to all other techniques of symptom analysis and differential diagnosis. Because it reflects the common

features of all these techniques it is appropriately applied to the clinical analysis of every illness in every branch of CM.

Analysis of the state of Qi and blood and analysis of the functional status of the visceral organs are both applied primarily to internal and miscellaneous illnesses. They are often used in conjunction with the technique of analysis by the Eight Fundamentals.

The remaining two major techniques, analysis by the Six Meridians and analysis by the Four Levels, are designed for illnesses caused by external agents.

These techniques of symptom analysis and differential diagnosis are described in detail in Volume 1, Part II, Chapter 9.

## **Section 2 Principles of Diagnosis in CM**

### **I Approaching Patient Holistically**

The holistic approach to the patient has two meanings.

In one meaning the human body is taken as an organic whole, so that pathological changes in one region of the body can affect the whole body and pathological changes of the whole body may be reflected in a local area. An illness in the exterior of the body can transmit into the interior, and illness in the visceral organs can be reflected in the exterior. For example, dryness of the eyes is usually due to deficiency of liver-Yin or liver-blood; and inflamed eyes indicate Heat in the liver meridians or strong Heat in the lung. If one sees only the local symptoms without regard to analysis of the overall condition of the entire body then it is difficult to arrive at a correct diagnosis.

In its other meaning the holistic approach emphasizes the mutual relationship between the human body and its natural surroundings. Humans live in the natural environment and are affected at all times by weather and other influences. When there are unusual changes in the environment and the body fails to adapt functionally to these changes, and then illness may result. Hence, in order to make an accurate diagnosis the physician must observe the patient's environment and incorporate this observation when analyzing the patient's symptoms.

## **II Comprehensive Analysis of All Symptoms**

Each of the four Methods of Diagnosis – History, Inspection, Auscultation and Olfaction, and Palpation – collects clinical information and provides a unique approach to an understanding of the illness, and none can be replaced by another. To arrive at an objective and reliable diagnosis all four must be employed in concert. Thus, clinical information on the development of the present illness, the evolution

of the symptoms, past illnesses of the patient and of the family members can be obtained only by taking the history. The physical condition and vitality, the complexion and the behavior of the patient can be obtained only by inspection. The quality of the voice and the emanating odors can be assessed only by auscultation and olfaction. The pulse, which reflects the state of the patient's illness, can be obtained only by palpation.

Moreover, on occasion an illness may show false symptoms. On such occasions the concerted application of these methods is especially important.

### **III Diagnosis by Symptom Analysis and Differential Diagnosis**

This means that in approaching a patient the physician must determine the type of illness, then on the basis of the pattern of symptoms the illness affecting the patient. Identification of the illness can convey much information on the entire course of the pathological changes, whereas the pattern of symptoms reflects the situation at a particular point of time. Determining the pattern of symptoms without ascertaining the diagnosis cannot lead to a firm grasp of the entire course of the illness and the mechanisms of pathological changes. On the other hand, making illness diagnosis without differentiating the pattern cannot make rational treatment possible.

In general, symptom analysis should precede differential diagnosis. For example, if a patient shows such symptoms as polydipsia (excessive thirst), polyphagia (excessive eating), polyuria (excessive urine) and emaciation, then by applying symptom analysis the physician can recognize and determine that the pattern of symptoms is one of diabetes. Then, from the relative significance of these findings, the changes in the tongue and the pulse and the physical constitution and condition of the patient he can further determine whether the illness is due to Heat in the lung damaging fluids, blazing Heat in the stomach, deficiency of kidney-Yin or deficiency of both Yin and Yang. Once a clear diagnosis has been obtained treatment can proceed accordingly. Thus, CM treats every patient with an individualized protocol rather than using a common protocol for patients who suffer from the same illness.

## **Guidance for Study**

### **I Aims of Study**

This chapter introduces the diagnostic methods of CM and briefly describes their application. It also introduces the principles of diagnosis in CM.

## **II Objectives of Study**

After completing this chapter the learners will:

1. Be familiar with the basic methods of CM diagnosis;
2. Be familiar with the principles of CM diagnosis.

## Chapter 8

# Diagnostic Methods

The main diagnostic methods of CM are Inquiry, Inspection, Auscultation and Olfaction, and Palpation. These methods are usually called the “Four Diagnostic Methods” of CM, and this chapter describes them in detail.

### Section 1 Inspection

The method of inspection applies visual observations of the exterior of the body in order to deduce the state of the patient’s health and illness. It focuses mainly on observation of the patient’s mental status, coloring of the complexion and skin, general appearance and the tongue.

#### I Mental Status

Mental status is the external manifestation of the state of the vital processes of the entire body. It includes the patient’s vitality, consciousness and thinking process. The mental activities are generated by the physiological activities of the visceral organs and are dependent upon the material bases of Qi, blood and body fluids. If the visceral functions are normal and Qi and blood are ample then the mind is vigorous. Conversely, if the visceral functions are abnormal and Qi and blood are inadequate then the mental status is abnormal. Thus, the normality and vigor of the mind is an important indication of body health.

Mental status is reflected in the eyes, complexion, posture, speech and level of consciousness. But because of the most intimate relationship between the eyes and the visceral organs the most important aspect of assessing mental status is the observation of eyes.

Mental status is generally classified as vigorous, lethargic or pseudo-vigorous. **Vigorous Mental Status.** Vigor reflects ample vitality, Qi and essence. It is seen as bright and lively eyes, a radiant complexion, natural and relaxed expressions and posture, alertness, smooth movements, clear and coherent speech, and mental clarity.

Vigorous mental status indicates that essential Qi is ample, the constitution is strong and vitality is full. Even when the person is ill, it indicates that essence and Qi have not been damaged, the visceral organs have not been injured and the prognosis is excellent.

**Lethargic Mental Status.** Lethargy is a sign of exhaustion of essence and deficiency of Qi. There are a variety of characteristic symptoms, such as dull eyes, slow and awkward movement, blurred vision, dull complexion and facial expression, heaviness of the body, and sluggish responses. In severe cases there may be confusion, delirium or hallucinations.

Lethargic mental status indicates that genuine Qi has been damaged, so that essence and Qi are both depleted and all functional activities are depressed. Clinically it is a sign that the illness is grave and the prognosis unfavorable.

**Pseudo-vigorous Mental Status.** This is a false and transitory improvement in mental status when the illness is critical. It is often seen when death is imminent in a patient who has been seriously or chronically ill, with exhaustion of essence and Qi. The patient suddenly shows mental alertness, bright eyes, clarity of thought (though often restless or agitated), desire to sit up, talkativeness (though often with simple and repetitious content), a louder voice, flushed cheeks and appetite.

Pseudo-vigor is thus an abnormal sign in a patient whose visceral essence and Qi are on the verge of collapse and the vestigial Yang is about to disperse. It must be distinguished from real improvement in the illness. In general, pseudo-vigor comes abruptly and is transitory. Its features do not match the patient's general condition. The ancients compared it to the flash of brightness of a lamp just before it died from exhaustion of the fuel.

## II Skin Color

Inspection of skin color attempts to assess the state of an illness by the coloring and luster of the skin, since their changes reflect the state of visceral Qi and blood. In CM five skin colors are of clinical importance: blue, red, yellow, white and black. They are referred to as “the five colors” and each corresponds to one of the *zang* organs (also see Volume 1, Part I, Chapter 1, [Section 2](#), Subsection III, Sub-subsection 2). The color of the skin reflects the nature of the illness and the abnormalities of the visceral organs. The luster of the skin, which indirectly measures the skin's state of hydration, principally reflects the ampleness of the visceral organs' essence and Qi.

Changes in skin color and luster are best understood because they are so readily observed. The face is rich in capillaries; it is therefore well supplied with Qi and blood. Essential Qi of all the *zang-fu* organs reach upward to the face. Also, the skin of the face is tender and thin, so that changes in color or luster are readily observable. For these reasons observation of facial color and luster is the main part of inspection of skin color and luster.

## ***1 Characteristics of Normal Skin Color***

Normal skin color results from the blending of the five colors and the color of blood. It is bright and lustrous. A normal skin color indicates that essential Qi, blood and fluids are ample and that the visceral functions are normal.

Normal skin color has a primary color and a secondary color. The primary color is the normal color of persons of the patient's racial group. In a place like China, where virtually most of the people are of one race, this is a simple matter; but in a place with many races, hence persons with many different primary skin colors, it is very important to bear this in mind. Also, because of differences in the body's constitution and other factors, even persons of the same race may show some variance in their primary skin color.

Because the human body is in communion with its natural environment normal skin color also varies with the climate, the season and the living conditions. This is known as the secondary color. For example, the complexion turns slightly blue in spring, slightly red in summer and slightly yellow in late summer; and it is lighter in autumn, and darker in winter. Age, diet, pattern of physical activities, changes in the emotional state, occupation, and amount of exposure to sunlight and wind – all these also affect the skin color. So long as the skin color retains the characteristics of normal skin color it is still considered normal.

## ***2 Characteristics of Abnormal Skin Color***

Abnormal skin color may be dull and withered in appearance; it may be bright and more vivid in hue than normal; it may be a single color unblended with the color of blood; or it may show changes because of the season or climate.

The complexion also varies with the physical condition of patients and the severity of the illness. In terms of prognosis, it can be classified as favorable or unfavorable. In general, a favorable complexion is one that though abnormal is still lustrous. It indicates that the pathological changes have been relatively mild, visceral essential Qi has not become deficient and stomach-Qi is still sufficient to nourish the face; hence, the prognosis is good. Conversely, a complexion that is abnormally vivid or withered and dusky is unfavorable. It indicates that the pathological changes have become severe, visceral essential Qi has become deficient and stomach-Qi is exhausted; hence, the prognosis is poor.

The *Plain Questions* contains descriptions of five favorable and five unfavorable complexions. The five favorable ones are: "blue as a kingfisher's feathers; red as a cockscomb; yellow as a crab's abdomen; white as lard; and black as a crow's feathers." The five unfavorable ones are: "blue as withered grass; red as clotted blood; yellow as an unripe orange; white as dried bone; and black as soot." Thus, the key in observing facial complexion is this: whatever the color if it is lustrous it is favorable, but if it is withered and lusterless or excessively vivid it is unfavorable.

The former indicates that Qi and blood have not been depleted, so that though ill the patient can be cured. The latter indicates that essence and Qi have been depleted, so that the illness is critical and difficult to treat.

3 *Diagnostic Significance of Colors*

These five colors not only reflect abnormalities of the respective internal organs, but also the different natures of the pathogenic agents. Pathological changes in the interior of the body can be inferred from observing changes in the patient’s complexion.

i **Blue**

A blue complexion suggests Cold, pain, blood stasis or epilepsy. The blueness is mostly due to impeded flow of Qi and blood, constriction of the vessels and the blockage by blood stasis. The most common varieties are listed in [Table 8.1](#).

ii **Red**

A red complexion suggests Heat and Fire. Deep red suggests strong exogenous Heat or Fire and light red suggests interior deficiency-Heat.

Red is the color of summer and blood. Its Qi is summer-Heat, and it is associated with the heart and the small intestine. When blood has warmth it flows. If the warmth becomes excessive, blood will fill the capillaries in the skin, causing redness of the skin. This is the reason why flushing is usual in illnesses due to Heat.

**Table 8.1** Clinical correlates of blue complexions

Complexion	Accompanied by	Associations
Bluish and pale		Exogenous Cold invasion; endogenous Yin-Cold
Blue grayish, with cyanosis of lips	Chest pain and tightness	Suppressed heart-Yang; impeded blood circulation; stasis of heart-blood
Cyanotic	Chest and subcostal pain	Impeded flow of lung-Qi; stagnation of liver-Qi
Cyanotic, especially nasal bridge, between eyebrows	Infantile high fever	Aura of convulsion

**Table 8.2** Clinical correlates of red complexions

Complexion	Accompanied by	Associations
Whole face bright red and aglow		Exogenous fever; interior-Heat due to excess of visceral Yang
Malar flushing		Yang excess due to Yin deficiency
Periodic glow with rouge-like flushing, mild redness with some pallor, that shift unstably	Pallor of critically or chronically ill patient	False Heat due to the excessive Yin in lower body and rootless Yang rising into upper body

**Table 8.3** Clinical correlates of yellow complexions

Complexion	Accompanied by	Associations
Pale yellow and withered		Spleen-Qi deficiency causing inability to nourish face
Yellow, puffy		Spleen unable to control water so that water suffuses skin
Entire body yellow, including sclera	Vivid orange	Yang-type jaundice: accumulation of Dampness-Heat in the body
	Dull yellow as though smoked	Yin-type jaundice: accumulation of Cold-Dampness in the body

The most common varieties of red color are listed in [Table 8.2](#).

### iii Yellow

A yellow color suggests deficiency of Qi and blood or Dampness in the body.

Yellow is the color of late summer. Its Qi is Dampness, and it is associated with the spleen. If the spleen is weak it is unable to carry out its transportation function so that Qi and blood are not replenished, or it is unable to transform fluids so that Dampness accumulates internally.

The most common varieties of yellow color are listed in [Table 8.3](#).

### iv White (or Pallor)

A white color suggests deficiency of Qi and blood or Cold.

White is the color of autumn. Its Qi is Dryness, and it is associated with the lung. White color, or pallor, is a sign of insufficient Qi and blood so that the face loses

**Table 8.4** Clinical correlates of white complexions

Complexion	Accompanied by	Associations
Pale and puffy face		Insufficiency of Yang-Qi
Mild pallor, wan face		Qi deficiency
Pallid	Sudden onset, profuse cold sweat	Sudden collapse of Yang-Qi
	Severe abdominal pain with rigidity	Yin-Cold gelling with constriction of meridians

**Table 8.5** Clinical correlates of black complexions

Complexion	Associations
Dark dusky face, cheeks	Insufficiency of kidney-Yang
Dark dehydrated face	Depletion of kidney-essence and blazing of Fire due to Yin deficiency
Dark and rough face	Blood stasis
Periorbital darkness	Kidney insufficiency or water retention; vaginal discharge due to downward flow of Cold-Dampness

its nourishment. A white complexion can occur in a number of clinical situations: when Yang-Qi is insufficient so that Qi and blood become too weak to flow; when exogenous Cold lodges in the meridians causing spasms; or when there is massive bleeding leading to insufficiency of Qi and blood.

The most common varieties of white color are listed in [Table 8.4](#).

**v Black**

A black complexion suggests deficiency of Kidney-Qi and Kidney-Yang, Cold, blood stasis or water retention.

Black is the color of winter. Its Qi is winter cold, and it is associated with the kidney and the urinary bladder. Deficiency of kidney-Yang causes failure to transform fluids, retention of water, loss of warmth in the meridians causing their constriction, and impeded circulation of blood. As a result the face becomes black.

The most common varieties of black color are listed in [Table 8.5](#).

**III General Appearance**

Robustness and fullness of the body reflect ampleness of essential Qi of the visceral organs, whereas weakness and thinness reflect deficiency of essential Qi of the visceral organs. In general, when the interior is ample the exterior is robust, and when the interior is deficient the exterior is weak. Thus, from inspection of

the general appearance of the body the physician can infer the functional state of the visceral organs, the ampleness or insufficiency of Qi and blood, and the relative rise or fall of genuine Qi and evil Qi.

## ***1 Robustness or Weakness***

Robustness means the person is vigorous, the skin lustrous and hydrated, the muscles well developed, the chest broad and thick, and the skeleton strong. It indicates that Qi and blood are ample and the viscera are healthy, so that susceptibility to illness is very low. Even if such a person falls ill the prognosis is excellent.

Weakness means the person is debilitated, the skin wizened, the muscles thin, the chest narrow and the skeleton slender. It indicates that Qi and blood are insufficient and the viscera limp. If such a person falls ill the prognosis tends to be less favorable.

The five *zang* organs correspond to five tissues in the body. The liver governs the sinews, the heart the meridians (and circulation), the spleen the muscles, the lung the skin and the kidney the bones. Thus, the state of the sinews reflects the state of liver-blood. The state of the meridians (and circulation) reflects the state of heart-blood. The state of the muscles reflects the state of the spleen and the stomach. The state of hydration of the skin reflects the state of lung-Yin. The state of the bones reflects the state of kidney-essence.

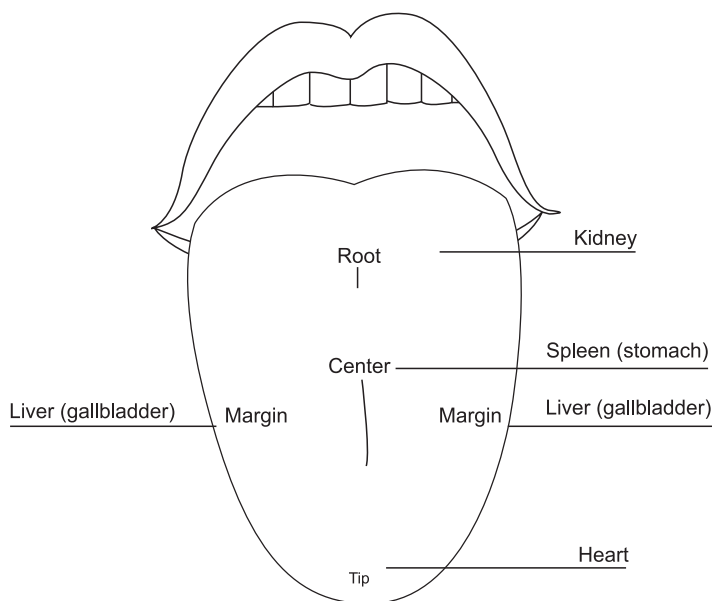
## ***2 Obesity or Thinness***

Obesity is not robustness. Both obesity and thinness are abnormal. In general, a person who is obese, with white and lusterless complexion, subdued mental status, shortness of breath, reduced strength and slack muscles has insufficiency of Yang-Qi and accumulation of Phlegm and Dampness. A person who is thin, with wan appearance, sallow complexion, delicate muscles and dehydrated skin has insufficiency of Yin-blood and deficiency-Fire. Thus, the Yuan dynasty physician Zhu Danxi said: "The obese tend to have Phlegm, whereas the thin tend to have Fire."

Bones resembling dried wood and wizened skin in a thin patient signify that body fluids and visceral essential-Qi are critically depleted.

## **IV Tongue**

The tongue is directly or indirectly linked to all the visceral organs and thus closely reflects the state of Qi, blood and body fluids. It is a mirror for the internal organs, so inspection of the tongue is one of the most important techniques of diagnosis. (For the tongue pictures, please refer to Appendix I).



**Fig. 8.1** Tongue

## ***1 Basic Tongue Diagnosis***

Different parts of the tongue correspond to different visceral organs. The tip of the tongue corresponds to the heart and the lung; the middle part to the spleen and the stomach; the root to the kidney; and the two sides to the liver and the gallbladder. However, any clinical information so obtained must be analyzed in conjunction with information about the coating as well as the texture of the tongue (see [Fig. 8.1](#)).

During inspection of the tongue the patient should face the light with his tongue protruding naturally for observation. Inspect the coating first, then the body of the tongue. Pay special attention to the effects of the light and the seasons, and disregard the staining due to food, drink and drugs.

## ***2 Contents of Tongue Diagnosis***

Inspection of the tongue encompasses observation of the texture and coloring of the body and the coating of the tongue. The body refers to the structure of the muscles and blood vessels of the tongue, whereas the coating refers to the residue on the surface of the tongue. In CM the coating is formed from steaming by Qi ascending from the spleen and the stomach.

The body of the normal tongue has these features: it is supple and nimble; its color is lightly red and bright; it is neither fat nor thin; and it is normally shaped.

The normal coating is thin and white, moist but not wet, and neither greasy nor sticky. There are clearly discernible grains that are evenly spread; these grains are rooted and cannot be scraped off. The normal tongue is usually characterized as a “light red tongue with thin and white coating.”

It is important that the tongue and its coating are analyzed together. But there are differences in emphasis. In general, the tongue body is more important for assessing the state of the internal organs and the tongue coating for assessing the degree of severity of the illness and the adequacy of stomach-Qi.

### i Tongue Coating

When examining the tongue coating, carefully note the changes in its color and texture (see [Fig. 8.1](#)).

**(1) Coating Color** Four colors are commonly seen clinically: white, yellow, gray and black. The clinical correlates of tongue coating colors are summarized in [Table 8.6](#).

**White Coating** A white coating may be thick or thin. A thin coating allows the body of the tongue to be seen through it, whereas a thick coating does not. A thin white coating that is moist and evenly distributed is normal. But if there are chills and fever and a floating pulse then a normal thin white coating indicates the early stages of illness, with the disease evil still in the exterior. A wet thin white coating suggests Cold or Cold-Dampness. A dry thin white coating suggests that the disease evil has not been eliminated from the exterior and lung-fluid has been injured.

A thick white coating may be due to Cold or Heat. If it is slick or greasy it suggests accumulation of Phlegm, Cold-Dampness or retained food causing obstruction. If it is dry it suggests turbid Phlegm attacking upward with Heat damaging fluids. If it appears curdled it suggests Phlegm-Dampness accumulating internally and turbidity in the stomach inducing Heat. If it appears powdery, covers the entire tongue and cannot be wiped off it suggests an illness of exogenous pestilential fever with internal accumulation of Heat. The last is common in febrile epidemics and internal abscesses.

**Yellow Coating** A yellow coating may be light yellow, deep yellow or burnt yellow. It may also be thick or thin, moist or dry, curdled or greasy.

A yellow coating suggests Heat in the interior. It is commonly seen when the Heat evil enters the interior or the Cold evil enters the interior and transforms into Heat. It is also seen in indigestion. Recent research has shown that the formation of a yellow coating is closely linked to disturbances of digestive functions caused by high fevers.

A thin and smooth yellow coating suggests that the pathogenic evil has just entered the interior but Heat has not yet damaged fluids. A thin and dry yellow coating suggests that the Heat evil is established and has damaged fluids. A greasy yellow coating that is moist and wet suggests internal accumulation of Dampness and Heat.

**Table 8.6** Clinical correlates of tongue coating colors

	Color and Texture		Clinical Significance
White coating	Thin white coating	Illness in exterior or of Cold	Normal; or early illness in exterior
	Thick white	Slick or greasy	Phlegm or Cold-Dampness accumulation; indigestion
		Dry	Phlegm accumulation in upper body; Heat damaging body fluids
Yellow coating	Thin, yellow, slick	Exogenous Heat in interior, or damage of body fluids by Heat; also indigestion	Disease evil just entering interior, body fluids not yet impaired by Heat
	Thin, yellow, dry		Strong Heat depleting body fluids
	Yellow, greasy, wet		Heat-Dampness in interior
	Thick, yellow, dry		High fever consuming body fluids
	Blackish, yellow, dry, with patches		Strong Heat exhausting body fluids
Gray coating	Gray and dry	Severe Heat or Dampness-Cold; prolonged illness of digestive tract, dehydration, or acidosis; cigarette smoking	High fever consuming body fluids; excessive Fire due to Yin deficiency injuring interior
	Gray and wet		Phlegm accumulation in interior, or Cold-Dampness in interior
Black coating	Black and dry, or black and dry with fissuring and prominent filaments	Often, critical stage of strong Heat or Cold in interior; also upward flaming of heart-Fire; In center of tongue: dry constipation or impending exhaustion of stomach-Qi. In root of tongue: strong Heat in lower-jiao	Strong Fire exhausting body fluids; impending exhaustion of kidney-Yin – severe sign
	Black and wet		Upward flow of Dampness due to Yang deficiency and strong Cold

A thick but dry yellow coating indicates fluid damage by high fever. A burnt yellow coating that is patchy suggests strong Heat evil causing depletion of fluids.

In general, the more yellow the coating the stronger the Heat evil.

**Gray Coating** Gray is transformed from white or is concurrent with yellow. It suggests either Heat or Cold-Dampness.

A dry gray coating reflects damage of fluids by Heat, and is seen in an illness of exogenous Heat or endogenous Fire due to Yin deficiency. A smooth and moist gray coating suggests accumulation of Phlegm or Rheum, or internal blockage by Cold or Dampness.

Clinically, a gray coating is mainly seen in severe illness, chronic digestive disorders or dehydration with acidosis.

**Black Coating** A black coating is mostly seen in very serious stages of illness. Sometimes, however, it accompanies a mild illness, or even occurs without any obvious illness, as in chronic cigarette smoking. Care must be taken to distinguish these situations.

In general, a black coating indicates an illness in the interior, whether due to extreme Heat or extreme Cold. A dry black coating reflects depletion of fluids by Fire. If the coating is patchy as well with high filaments then internal Heat is extreme and kidney-Water is on the verge of total exhaustion – it is a severity and danger sign. A moist and slick black coating suggests strong Cold due to serious Yang deficiency so that Dampness overflows upward.

Both gray and black coating indicate severe Heat or Cold in the interior. In general, the darker the shade the more serious the illness. If the black coating is dry and covers only the tip of the tongue it indicates heart-Fire burning outward. If it covers the body of the tongue it indicates dry constipation or stomach-Qi on the verge of collapse. If it covers the root of the tongue it indicates strong Heat in the lower-jiao.

## (2) Coating Texture

This refers to how thick the coating is and what other characteristics it has, such as moisture, greasiness, curd quality, or exfoliation.

**Thickness** If the tongue body can be seen through the coating, the coating of the tongue is thin; otherwise, it is thick. The thickness of the coating reflects the depth of the location of illness and the strength of the pathogenic evil in the body.

A thin coating suggests illness in the exterior or mild illness in the interior. It indicates that genuine Qi has not been injured and evil Qi is not strong. A thick coating suggests a more severe illness and a deeper location of illness. It indicates Phlegm accumulation, or retention of undigested food, so that turbidity-containing stomach-Qi rises to the surface of the tongue.

Thickening of a thin coating suggests worsening of the illness, whereas thinning of a thick coating indicates that the genuine Qi is subduing the evil.

**Moisture** A normal tongue coating is moderately moist and neither slick nor rough. It reflects normal flow of body fluids that have not been damaged. A coating is slick if saliva is excessive and about to drool. Such a slick coating suggests exogenous

Cold or Dampness or accumulation of Dampness and Phlegm made possible by deficient Yang not being able to rise upward.

A dry coating, whether dry and rough or dry and coarse to the touch, reflects fluid damage by excessive Heat. This usually occurs when deficiency of Yin-fluid or accumulation of Dampness obstructs Yang-Qi, so that Qi cannot generate fluid. A coating that is hard, tough and patchy suggests blazing Fire and severe damage to fluids, with consequent failure to keep the coating moistened.

The drying or moistening of the tongue coating reflects declining or rising amounts of fluids. A moist coating turning dry means that Heat is strengthening and fluids are being damaged. A dry coating turning moist means that Heat is weakening and fluids are recovering.

**Curdling** The waxing and waning of Yang-Qi and Dampness can be inferred from the curdling of the tongue coating. Curdling means the coating consists of large and coarse grains loosely scattered like a layer of bean-curd dregs and is easily scraped off. Its presence suggests strong Yang-Heat causing turbid stomach-Qi to rise and collect on the tongue. This can occur in retention of undigested food or accumulation of Phlegm. It is also seen when Dampness-Heat cause internal abscesses or aphthous stomatitis.

If the coating is thick and viscid like pus it is called “purulent curd coating.” It is seen in pulmonary abscess, stomach abscess or liver abscess due to very strong pathogenic evil in the body. It indicates a severe and serious illness.

If the coating is a layer of white membrane or granules like boiled rice it is called “rotten-curd coating.” It is often seen in severe illnesses of Dampness-Heat, high fever, heat stroke, bloody dysentery and syphilis. Its presence indicates collapse of stomach-Qi and a poor prognosis.

**Greasiness** A greasy coating is smooth and fine with even granulation and is difficult to scrape off. It is often seen when Yang-Qi is suppressed by large accumulations of turbid Dampness, so that turbidity rises and collects on the tongue. The condition arises mostly from illnesses of Dampness, Phlegm, food retention or Dampness-Heat.

**Exfoliation** This means that part or all of the coating has sloughed. A variety of names are used to indicate which part of the coating has sloughed. In *frontal exfoliation* only the part in front has sloughed. In *central exfoliation* only the central part has sloughed. In *patchy exfoliation* scattered patches have sloughed so that patches of coating are intermixed with areas of smooth denuded tongue surface. In *geographical tongue* the remaining coating is in fragments that resemble landmasses on a map. In *mirror tongue* there is no coating left and the tongue surface is smooth and glossy like a mirror.

Exfoliation occurs in a number of conditions. The most important are: impairment of both Qi and Yin, depletion of Yin with drying of fluids, exhaustion of both Qi and blood, and a hyper-allergic constitution. In general, the degree of exfoliation is correlated with the severity of the illness. Mirror tongue is a danger sign that

stomach-Qi is about to collapse, stomach-Yin is about to dry, and the vital activities are about to cease.

The presence or absence of coating reflects not only the waxing or waning of stomach-Qi but also the struggle between genuine Qi and evil Qi. Disappearance of the coating is indicative of insufficiency of stomach Qi and Yin and decline of genuine Qi. Reappearance of a thin and white coating following exfoliation reflects victory of genuine Qi over evil Qi and recovery of stomach-Qi. It is better for the coating to change gradually rather than abruptly. The latter case often reflects sudden aggravation of the illness.

## ii Body of Tongue

### (1) Color of Tongue

Under normal conditions the body of the tongue is light red in color. There are five abnormal colors of the tongue. The clinical correlates of these colors are summarized in [Table 8.7](#).

**Pale White** This is paler than the normal light red, more white than red, sometimes without red. It results from deficiency of both Qi and blood, or depletion of Yang-Qi with loss of the motive force for blood flow. In both cases, blood is unable to flow upward and nourish the tongue. Thus, a pale tongue indicates an illness of deficiency or Cold. A pale and small tongue suggests deficiency of both Qi and blood. A pale, fat and tender tongue suggests gradual decline of Qi.

**Red** A bright red color of the tongue develops when Heat excites Qi and blood so that they flow more vigorously. As blood fills the vessels to capacity it also collects in the tongue and gives the tongue the red color.

A red tongue indicates Heat. If the tongue is red and rough or hairy and has a thick yellow coating, it suggests exogenous Heat. If it is red, plump and tender and has scant coating, or fissured, or smooth without coating, it suggests endogenous (deficiency) Heat. Red in the tongue tip indicates strong Fire in the heart, red in the sides of the tongue blazing Fire in the liver, and red in the middle of the tongue strong Heat in the middle-jiao.

**Crimson** This is a deeper red than red. The causes of crimson color in the tongue are the same as those for red color, except that Heat or Fire is stronger. Thus, crimson indicates extreme Heat. In illnesses caused by exogenous disease evil a crimson tongue indicates that Heat has entered the Nutritive and Blood Levels (see Volume 1, Part II, Chapter 9, Section 5) or Heat is hiding in the heart and the stomach and transmitting in retrograde fashion into the pericardium. In internal illnesses it indicates blazing Fire in Yin deficiency or depletion of stomach and kidney fluids; the tongue coating is correspondingly dry or fissured. A crimson and moist tongue with little coating suggests blood stasis causing internal blockage.

Both red and crimson color indicate Heat, the deeper the red the stronger the Heat evil. A change from light red to deep red to crimson indicates that the Heat

**Table 8.7** Clinical correlates of abnormal tongue colors

Abnormality			Clinical Significance	
Pale tongue	Slightly red, or blood-less color	Thin, small, pale tongue	Illness of deficiency or Cold	Deficiency of both blood and Qi
		Plump, tender, pale tongue		Deficiency of Yang-Qi
Red tongue	Redder than normal	Rough and red, hairy; thick and yellow coating	Illness of Heat	Accumulation of Heat-Dampness
		Tender and red; slight/no coating, or with fissures		Heat due to Yin-deficiency
		Tip red		Heart-Fire flaring up
		Sides red		Liver and gallbladder Fire
Crimson tongue	Deep red	Crimson with dry or split coating		Strong Heat in middle-jiao
				Exogenous Heat invading Nutritive and Blood Levels, or Heat accumulation in heart and stomach; direct transmission of disease evil to pericardium
		Crimson with scant moist coating		Strong Fire in Yin deficiency, or exhaustion of stomach and kidney fluid in internal injury
Purple tongue	Purple	Purple tongue becoming dry and withered	Qi stagnation and blood stasis	Blood stasis in interior
		Light purple or blue-purple and moist		Heat consuming fluids, Qi stagnation and blood stasis
Bluish tongue				Blood stasis due to Cold
				Entire tongue is blue: Cold bottling up Yang, or Yang deficiency permitting Cold accumulation. Only sides of tongue are blue: blood stasis in interior

evil is strengthening and the illness worsening. Conversely, a change from crimson to deep red to light red indicates that the Heat evil is retreating.

**Purple** A purple tongue suggests stagnation of Qi and stasis of blood, or impeded blood circulation. The latter is due to exogenous Cold or Heat, deficiency of Yang-Qi, alcoholic poisoning, food retention, Phlegm and Rheum, or Dampness-Heat.

If Heat is strong and damages fluids, thus inducing Qi stagnation and blood stasis, then the tongue turns crimson or purple, dry and dehydrated. If Cold becomes gelled internally and induces blood stasis, then the tongue turns light purple or blue-purple but remains well hydrated.

**Blue** A blue tongue is seen in strong Yin-Cold in the interior bottling up Yang. As a result, the motive force for blood circulation is weakened leading to blood stasis. If the entire tongue is blue then Yang is trapped in the interior by gelled Cold, Yang deficiency permits gelling of Cold, or there is blood stasis in the interior. If only the sides of the tongue are blue then there is blood stasis.

## (2) Form of Tongue

The main abnormal forms of the tongue are enlarged, atrophied, hairy, fissured and indented.

**Enlarged** In mild cases, the tongue fills the mouth and has some indentation from the teeth; this is said to be a “plump tongue.” In severe cases, the tongue is so large that the patient is unable to retract the tongue and close the mouth; this is said to be a “swollen tongue.”

In general, a plump tongue reflects water retention or blockage by Phlegm and Dampness. This usually results from deficiency of Qi, insufficiency of Yang or spleen deficiency, so that the fluids’ metabolism is disturbed or the Phlegm and Rheum overflow upward. A swollen tongue, on the other hand, reflects Qi stagnation in the upper body and blazing Heat and Fire in the heart.

Clinically, sometimes it is difficult to distinguish the significance between the plump and the swollen tongue, and the physician must rely on the color of the tongue to diagnose Cold, Heat, deficiency or strength. For example, a pale, tender and plump tongue with white coating suggests retention of fluids due to deficiency of spleen and kidney Yang-Qi. An enlarged tongue that is red and is covered by yellow and greasy coating suggests Dampness-Heat causing Phlegm to flow upward. A crimson and swollen tongue suggests blazing Heat in the heart. Moreover, a purplish-blue and swollen tongue suggests poisoning by alcohol and blood stasis due to poisoning.

**Atrophied** Atrophy of the tongue is due to loss of nourishment because of deficiency of both heart and spleen Qi. As a result Qi, blood and Yin-fluids are deficient and Fire blazes in Yin deficiency. A pale and atrophied tongue suggests deficiency of both Qi and blood. An atrophied and red or crimson tongue suggests intense Heat injuring Yin or blazing Fire due to Yin deficiency.

According to recent advances in tongue research, other conditions can also lead to atrophy of the tongue, such as deficiency of certain vitamins, blood deficiency, digestive dysfunction of the stomach and the intestines, malnutrition due to severe infections, and muscular dystrophy involving the tongue.

**Hairy** In some conditions the tongue may be covered with filaments or polyps so that the tongue resembles a strawberry. The polyps may be red, white or black, whereas the filaments are mostly black or red. Filaments and polyps may appear on the sides and tip of the tongue or spread over the entire tongue. Their presence suggests toxic effect of intense Heat, sustained Heat in the heart or in the Nutritive and Blood Levels, or Dampness-Heat in the Blood Level of the warm illnesses.

**Fissured** Fissures may be seen over the entire tongue or confined to specific areas (front, sides or tip). They may be oriented in various directions, and may be of various shapes or depths. The deeper ones may resemble cuts.

Fissures are seen mainly in conditions of deficiency, especially of blood or Yin, but also in conditions of severe Heat. In all these cases, the tongue loses its nourishment and the tongue surface shrinks. A pale fissured tongue suggests blood deficiency. A red or crimson fissured tongue suggests strong Heat consuming and depleting fluids.

Also, about one in two hundred normal persons have congenital fissures. In such persons the fissures are covered by normal tongue coating, and there is no symptom of illness. This must be distinguished from abnormal fissures.

**Indented** An indented tongue is one that shows depressions on the sides due to pressure from the teeth. Such indentations are mostly seen in conditions of spleen insufficiency with impaired transportation, so that fluids and Dampness accumulate and collect in the tongue. The plump tongue is then pressed against the teeth. Thus, indentation and plumpness tend to occur together.

A pale and moist tongue with indentations suggests accumulation of Cold and Dampness or excess water due to Yang deficiency. A reddish tongue with indentations suggests spleen insufficiency or Qi deficiency. A red and swollen tongue with indentations suggests Phlegm accumulation due to Dampness-Heat.

### (3) Tongue Mobility

Under abnormal conditions the tongue may be spastic, flaccid, stiff, tremulous or wry.

**Spastic** In this condition the muscles of the tongue are contracted so that the tongue cannot be protruded. This must be distinguished from congenital tongue-tie, which is not linked to any illness.

Acquired spasticity of the tongue during an illness means the condition has become critical. A spastic tongue that is pale but well moistened suggests Cold congealing the sinews. A spastic tongue that is red and dry suggests Heat damaging fluids and causing muscular spasms. A spastic tongue that is plump and greasy suggests internal accumulation of Phlegm and Dampness, which paralyzes the root of the tongue. A spastic tongue associated with mental confusion and delirium

indicates a critical illness. Similarly, a spastic tongue in a chronic illness indicates that the illness has reached a critical stage.

**Flaccid** A flaccid tongue is limp and unable to protrude. There may be accompanying atrophy. In general, flaccidity indicates that deficiency of Qi and blood is extreme and Yin-fluids are exhausted.

Flaccidity in an atrophied tongue may be new or chronic. A newly flaccid and red tongue suggests very strong Heat evil damaging Yin-blood. A pale tongue that gradually becomes atrophic and flaccid suggests extreme deficiency of Qi and blood that has been progressing over a long period of time. In a chronic illness a red and dry tongue that is also flaccid is mostly due to the collapse of Yin in the liver and the kidney; it is a danger sign.

**Stiff** A number of illnesses can cause stiffness of the tongue. In an illness due to exogenous Heat, when Heat enters the pericardium and disturbs the mind the patient loses control over the tongue. High fever impairing Yin can cause the sinews, including the tongue, to lose their nourishment, hence the stiffness. Stiffness can also result from a variety of internal diseases in which turbid Phlegm chronically blocks the pericardium or Phlegm accumulates in the liver and liver-Wind blocks the tongue meridians. Regardless of the specific cause, stiffness of the tongue is always linked to abnormalities of the *zang-fu* viscera.

**Tremulous** Tremor of the tongue is found in two types of conditions. In one, there is deficiency of both Qi and blood, so that Yang collapse leads to fluid depletion. The sinews lose their warmth, nourishment and moisture and become restlessly tremulous. In the other, Dryness and Heat in the blood damage fluids and stir up Wind, which can induce convulsions.

A pale or reddish tongue that trembles gently suggests deficiency of both Qi and blood causing Yang collapse and fluid depletion. In illnesses due to exogenous Heat, red color and dryness in a tremulous tongue are due to Wind arising out of fluid depletion. A crimson tongue that trembles strongly suggests extreme Yang-Heat and internal movement of liver-Wind.

**Wry** A wry tongue is seen together with one-sided palsy of the mouth and eyes or hemiplegia. It is due mostly to the Wind evil attacking the meridians, Wind-Phlegm blocking the meridians, or Wind invading the visceral organs. When meridians are blocked the affected sinews may become flaccid and lose their ability to contract. If this happens on one side of the tongue it becomes wry; if it happens on one side of the body there is hemiplegia.

### 3 Clinical Significance

Because the tongue and its coating reflect the conditions of an illness in different ways, they must be examined and analyzed together to arrive at a more reliable understanding of the state of the illness. The most important clinical significance of tongue diagnosis is as follows.

### **i State of Genuine Qi**

A red and moist tongue indicates ampleness of Qi and blood, whereas a pale tongue indicates insufficiency of Qi and blood. A thin, white and moist coating of the tongue indicates ampleness of stomach-Qi, whereas the absence of a coating indicates decline or exhaustion of stomach-Qi and stomach-Yin.

### **ii Location and Severity of Illness**

In an exogenous illness a thin and white coating indicates a mild illness, whereas a thick and yellow coating indicates a more severe illness with the pathogenic evil in the interior. A red tongue indicates Heat in the Qi Level, whereas a crimson tongue indicates that Heat has entered the Nutritive and Blood Levels.

### **iii Nature of Causative Factors**

A white coating suggests Cold, whereas a yellow coating suggests Heat. A wry tongue indicates the stirring of endogenous Wind. A bluish purple tongue suggests blood stasis.

### **iv Progression and Regression of Illness**

In general, certain changes suggest that the illness is progressing from the exterior to the interior, from mild to more severe, or that Cold is transforming into Heat and Heat is damaging fluids. These changes are the following: the coating changing from white to yellow, then to gray and finally to black; the coating changing from thin to thick and from moist to dry; and the tongue itself changing from pale to red, then to crimson and finally to purple. If the changes occur in the opposite direction, then the illness is moving from interior to exterior, from severe to mild.

### **v Prognosis**

If the coating is normal and the tongue is light red, moist and supple then genuine Qi is still adequate and stomach-Qi not depleted; the prognosis is good. If the coating shows sloughing and the tongue is dusky and abnormal in mobility then genuine Qi has declined and stomach-Qi exhausted; the prognosis is poor.

## **V Skin**

The skin is the barrier of defense against external pathogens. All illnesses, whether due to exogenous pathogenic evils or endogenous pathogenic factors, have the potential to cause abnormalities in the skin. When inspecting the skin pay close attention to the changes in its color, moisture content, appearance and texture. The clinical significance of skin color is similar to that of the facial complexion. Here, the emphasis is on the following.

### ***1 Macular Rash***

A macule is typically red in color. It is flat and cannot be distinguished by feel from the surrounding skin. It may be a dot or a patch, and is of variable size. It does not lose its color when pressed.

Clinically there are two varieties: Yang macules and Yin macules.

#### **i Yang Macular Rash**

A Yang macular rash is mostly seen in illnesses due to exogenous Heat, and its presence indicates that the Heat, i.e., the pathogenic evil, has entered the Nutritive and Blood Levels. Usually there are the additional symptoms of fever, thirst, a red or crimson tongue and a rapid pulse. If the macules are sparse, bright red in color, appearing first on the trunk then extending to the limbs, and at the same time the fever subsides and the mind clears, it is an indication that the evil Qi is dissipating through the skin and the illness is improving. Conversely, if the macules are numerous, red or dark purple in color, appearing first on the limbs then extending to the trunk, but the fever persists and the mind remains clouded, it is an indication that genuine Qi is unable to defeat evil Qi.

#### **ii Yin Macular Rash**

A Yin macular rash is due to deficiency of both Qi and blood and inability of the spleen to control blood. It is characteristically light red or dark purple in color, sparse, without specific locations and irregular; they also appear and disappear unpredictably, and are often accompanied by pale lips, pale tongue, cold limbs and a depletive pulse.

In general, a Yang macular rash indicates an illness of exogenous Heat, whereas a Yin macular rash indicates an illness of deficiency-Cold.

## **2 Papular Rash**

A papule is characteristically red in color, raised above the skin surface, millet-shaped and easily felt. A papular rash may be seen in many illnesses. The most common are as follows.

### **i Measles**

This is a common and acute childhood contagious illness. It is caused mostly by a seasonal pathogenic agent, which enters the body through the mouth and the nose and attacks the lung and the stomach. It is most common during winter and spring.

The rash of measles is typically in the form of rose colored papules that blanch on pressure. The individual papules may form patches but normal skin is visible in the patches between papules. The rash begins behind the earlobes and at the hair margins, gradually extending to the forehead, the neck and the trunk, and finally the limbs. The progression of the rash is complete in 3 to 4 days. After the rash clears there usually is desquamation and hyperpigmentation.

Inspection of the rash of measles should emphasize its color and appearance and the distribution of the papules. This information should be correlated with information about the other symptoms in order to assess the degree of severity and the prognosis of the illness. Thus, if the papules are red and moist, are evenly distributed, the rash advances and recedes in proper order, and the fever subsides as the rash fades, then the pathogenic evil is dissipating and the illness is mild with good prognosis. Conversely, if the papules are dark purple, densely distributed or coalesced into large patches before complete eruption, or they suddenly fade, and are associated with high fever and labored breathing, then the illness is severe and has a poor prognosis.

### **ii Rubella**

This is an acute contagious illness caused by seasonal Wind-Cold pathogenic evil. It mostly affects children between 6 months and 5 years of age, and is most common during winter and spring.

The papules of this rash are typically light red and are smaller than those of measles. They are sparse, mostly on the face and neck, do not coalesce and are often itchy. The eruption is generally complete within a day, and fades in 2 to 4 days. After the rash clears there is no desquamation or hyperpigmentation.

### **iii Urticaria**

This rash is usually due to disharmony between Qi and blood, disturbed nutritive and defensive Qi, or exogenous Wind-Cold or Wind-Heat expressed in the skin. In addition, inappropriate diet or emotional upheaval can also cause it.

The characteristic lesions of urticaria are nodules in the skin, both small and large. They range in size from sesame seeds to broad beans. In severe cases, there may be giant masses or patches. The rash is red, light red or white and intensely itchy. The lesions may come abruptly and evanesce.

If the urticaria is light red or white, the tongue coating is white and the pulse is tight, it is due to Wind-Cold. If it is recurrent or chronic, it is due to deficiency of both Qi and blood.

### **3 *Chickenpox***

Chickenpox is also an acute contagious illness. It is due to seasonal exogenous Wind-Heat attacking the lung and expressing in the skin.

Typically the rash of chickenpox first erupts on the trunk, shoulders and armpits before spreading to the proximal areas of the limbs. When they first appear the pox look like red papules. They soon transform into transparent crystal-like vesicles with a red collar, and may become cloudy. When the vesicles turn dry they leave a scab that eventually falls off, leaving no scar.

### **4 *Miliaria***

Miliaria (also known as prickly heat) is caused by Dampness-Heat, which induce profuse sweating and sometimes retention of sweat in the sweat pores.

The skin rash looks like a field of crystalline vesicles the size of millet seeds. The vesicles have thin walls that rupture readily. If undisturbed the vesicles will dry and desquamate. The rash is most prevalent on the chest, but can appear also on the neck and the trunk.

### **5 *Spider Angioma***

The spider angioma is a lesion that consists of a central red dot with radiating red arms, resembling a slender spider. Pressure on the central dot causes blanching. It occurs mostly on the face, the neck, the hands (dorsum), the arms, the chest and the shoulders.

Spider angiomas are caused by impedance of blood and fluid circulation with blockage of vessels. Their presence suggests liver disease (such as hepatitis and cirrhosis). However, a few spider angiomas may also be seen in healthy persons and pregnant women; in such persons they have no clinical significance.

## **6 *Scaling***

Scaling refers to local or extensive dryness and roughness of the skin, which result in lesions that are like fish scales and are rough to the touch. There are several varieties of scaling.

Dry scales are usually due to insufficiency of blood, with Wind-Dryness causing the skin to lose its nourishment.

Greasy scales are mostly due to Dampness and Heat.

If injury to the skin extends more deeply, with large patches of scaling tightly attached to underlying dark red macules, the cause is usually blood stasis in the interior.

If the affected skin is bright red, the overlying scales are fine like chaff or large like deciduous leaves, and there is itch or pain or a burning sensation, the cause is mostly accumulation of Cold and Dampness blocking the meridians and congealing Qi and blood.

## **7 *Erosion***

Erosion of the skin leaves a wound surface that is wet with serous fluid. Erosion tends to be shallow, and when healed there is no residual scar.

If the wound surface is bright red and wet, with slightly yellow clear fluid, it is mostly due to injury by Dampness and Heat. If the exuded fluid flows to adjacent skin and induces blebs by contact and the eroded surface is covered with a yellow-brown crust, it is mostly due to poisoning by Dampness. If the wound surface is pale or slightly red and the exuded fluid is clear and slight in amount, it is mostly due to spleen deficiency and strong Dampness.

## **8 *Ulceration***

An ulcer is the result of festering and breakdown of the skin, with pus exuding from and covering the wound surface. The damage is deeper than in the case of erosion, and after healing there is residual scar.

Ulceration may be acute or chronic. An acute ulcer is red and inflamed, with swelling and pain; it is mostly due to poisoning by Heat. A chronic ulcer is characterized by dusky granulation tissue; it is mostly due to deficiency of Qi and blood. If the granulation tissue is edematous the cause is mainly the strong Dampness.

## **9 Eczema**

Eczema is common in clinical practice. It is an inflammatory allergic skin illness, and is usually the result of triple attack by external Dampness, Heat and Wind. These pathogenic evils struggle in the skin and their interaction leads to impeded blood circulation and disharmony between the nutritive Qi and defensive Qi.

Eczema has a polymorphic presentation. It may be macular, papular, vesiculated, pustular, eroded, covered with exudate, or scabbed. It is especially common on the face, behind the ears, on the hands (dorsum), the scrotum, the armpits and the shanks.

If persistent, eczema becomes chronic. The affected skin becomes thickened, dry and coarse, and lichenous with altered skin pigmentation. Chronic eczema suggests that the illness is longstanding, and well established Dampness has given rise to Fire and has damaged fluids and blood; as a result blood becomes deficient and endogenous Wind arises, causing dryness and loss of skin nourishment.

## **10 Fissures**

Fissures tend to occur in the palms and dorsa of the hands, the fingers, the heels and the toes. They tend to develop in winter. Typically the affected skin is dry, thickened and hardened, with loss of elasticity. As the condition worsens the skin tends to crack and form fissures. Deep fissures may be painful and may bleed.

When Yin-fluids are insufficient and Qi and blood are disharmonious the skin loses its nourishment. If, in addition, it is attacked by Wind, Cold or another pathogenic evil, blood circulation becomes sluggish and the skin becomes dry and may crack.

## **11 Abscesses, Nodules, Furuncles, Folliculitis**

### **i Abscess**

An abscess is an acute purulent lesion. Abscesses may be internal or external. Internal abscesses are in the visceral organs, including such common ones as liver abscess, lung abscess, intestinal abscess (especially appendicitis), and others. External abscesses occur in the exterior of the body.

An abscess is a localized inflammatory swelling that is sharply defined. It is warm and painful to touch. Accompanying symptoms include high fever, thirst, dark yellow urine, a red tongue with yellow coating, and a rapid and forceful pulse. When it ruptures it drains thick yellow pus, and once drained granulation tissue grows quickly and the abscess heals.

Skin abscesses are mostly due to internal accumulation of Dampness and Heat, which causes impedance of Qi and blood circulation. Strong Heat can cause putrefaction of the tissues.

## **ii Subcutaneous Nodules**

This lesion is typically swollen and hard to the touch. The overlying skin has a normal color or is dusky. There is no heat and little pain. It tends to last a long time, neither suppurating nor healing. This lesion results from gelling of accumulated Cold and Phlegm, so that Qi becomes stagnant and blood circulation obstructed.

The Yin-type of ulcer that develops in sinews or deep in muscles is of the same type of illness.

## **iii Furuncles**

In its initial stage, a furuncle resembles a millet seed and is hard and firmly attached to the surrounding tissue. It is either numb or itchy. The roof of the lesion is pale but tender. As the furuncle matures it increasingly becomes red, warm to the touch, swollen and painful, and suppurates. After some days the furuncle ruptures at the surface and drains pus, following which the swelling and pain subside and the lesion heals.

Furuncles are mostly due to exogenous Wind and toxic Fire and are aggravated by improper diet. If a red line appears and radiates proximally from the furuncle it signifies that the poison from the furuncle is spreading into blood and attacking the visceral organs. In Western Medicine this is known as acute lymphangitis.

## **iv Folliculitis**

Folliculitis is an inflammatory illness of the hair follicle and adjoining glands of the skin. The lesion is superficial, small, round, red, painful and warm to the touch. It suppurates readily, and once it drains it begins to heal. Folliculitis is mostly due to localized poisoning by Heat in the interior or exogenous Fire, causing local stagnation of Qi and blood.

# **VI Inspection of Infant's Finger Venules**

This is a special diagnostic method usually for children below the age of 3. In an infant taking the pulse in the usual way is difficult because of the infant's small size and restlessness. This special method is devised because the infant's skin is thin, so the superficial venules are readily observable. The venules of the index finger are

used since they are branches of the Lung Meridian of the Hand-Taiyin, so that their diagnostic significance is the same as that of the usual pulse.

The correct procedure is as follows. Ask a parent to hold the infant facing the light in a bright place. Hold the infant's index finger in the left hand. With the right thumb gently massage the medial aspect of the infant's index finger from the tip to the palm. Repeat this several times in order to make the venules more prominent.

In observing the venules of the index finger of an infant, pay close attention to their color, appearance and location.

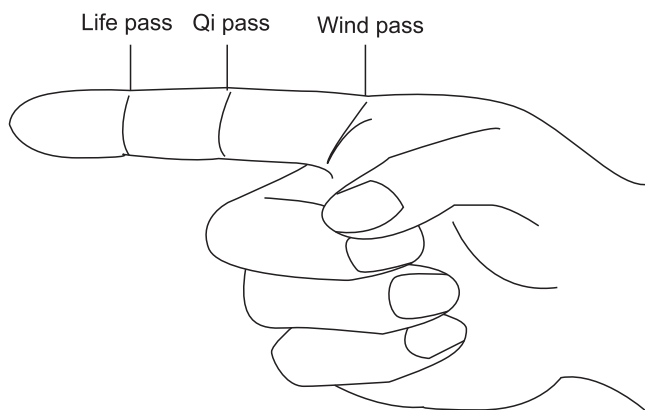
**Color.** The normal color is faintly red or yellow, not strikingly so. There are five abnormal colors: red, purple, blue, black and white. Bright red suggests exogenous Wind-Cold; purple suggests Heat; blue suggests pain or fright; and dark purple suggests blockage of blood vessels. White is not seen per se, but makes the other colors lighter. In general, light red indicates deficiency-Cold, and light purple deficiency-Heat.

**Appearance.** This includes whether the venules are deep or superficial, thick or thin and straight or curved. Superficial venules suggest an exterior illness, whereas deep and indistinct venules suggest an interior illness. Thin and light-colored venules are mostly seen in deficiency-syndromes of illnesses, whereas thick and strong-colored venules are mostly seen in illnesses of evil strength. Oblique venules without branching are mostly seen in mild illnesses, whereas venules with multiple branches are mostly seen in severe illnesses (see [Fig. 8.2](#)).

**Location.** Location refers to the Wind, Qi and Life Passes (see [Fig. 8.2](#)). The Wind Pass is the flexural crease over the metacarpophalangeal joint, the Qi Pass is the flexural crease over the proximal interphalangeal joint, and the Life Pass is the flexural crease over the distal interphalangeal joint. The location of visible venules reflects the strength of evil Qi, and the severity of the illness can be assessed. Visible venules at the Wind Pass suggest an illness that is relatively mild, superficial in location, and recent in onset. If the venules become visible at the Qi Pass then the pathogenic evil has entered the interior and the illness has become more severe. If the venules become visible at the Life Pass, even reaching the fingertip, then the illness is critical and the prognosis is poor.

## VII Excretions and Secretions

These include vomitus, sputum, saliva, spittle, nasal discharge, feces, urine, menses, vaginal discharge, tears, sweat and pus. Because the others are discussed elsewhere, this section discusses only vomitus, sputum, saliva, spittle and nasal discharge.



**Fig. 8.2** Locations for inspecting infant's finger venules

## 1 Vomitus

Vomiting is induced by the retrograde upward flow of stomach-Qi. Observation of the color, character and amount of the vomitus helps to understand the cause of the retrograde flow of stomach-Qi.

If the vomitus is thin and without any foul smell, the vomiting is due to a Yin illness. There are two common causes: deficiency of spleen-Yang and stomach-Yang; and exogenous Cold directly attacking the middle-jiao, causing dysfunction of the stomach and retrograde flow of stomach-Qi. Vomiting of turbid and malodorous vomitus is mostly due to Heat in the spleen and the stomach, or liver-Fire injuring the stomach and causing stomach-Qi to ascend abnormally. Vomiting of undigested food is mostly due to food retention or chronic insufficiency of the spleen and the stomach. This causes inability to digest food, hence its retention and the retrograde rise of stomach-Qi. Vomiting of clear water, saliva and sputum is mostly due to accumulation of Phlegm or Rheum. Vomiting of yellow-green and bitter fluid is mostly due to Dampness-Heat in the liver and the gallbladder or accumulation of Fire-Heat. Vomiting of fresh or dark purple blood with clots, with food dregs, is mostly due to Heat in the stomach, liver-Fire attacking the stomach, or blood stasis in the interior. Vomiting of mixed blood and pus is mostly due to gastritis.

## 2 Sputum

Sputum is the turbid and viscous matter expectorated from the airway. When observing sputum pay attention to its color, quantity and character.

Yellow and thick sputum, accompanied by agitation, a dry mouth and a yellow and greasy tongue coating, indicates an illness of Heat and Phlegm. It mostly results from strong Fire-Heat scorching fluids internally.

Clear and watery sputum, accompanied by cold-aversion, cold limbs and a white tongue with white coating, indicates an illness of Cold. It mostly results from exogenous Cold or disturbed transportation of water, and Dampness due to chronic Yang deficiency. The retained water and Dampness collect and thicken into sputum.

Copious sputum that is easily expectorated and accompanied by chest tightness indicates an illness of Dampness. Dampness accumulates in the interior either because of attack by exogenous Dampness or because of impaired transportation by the spleen. It then collects and thickens into sputum.

If the sputum is scanty, difficult to expectorate and accompanied by dry nose and dry mouth, it indicates an illness of Dryness-Phlegm. The fluids thicken into sputum either because of attack by exogenous Dryness or because of internal damage.

Bright red streaks of blood in the sputum indicate an illness of Heat damaging the lung meridian.

Sputum that is purulent, bloody and foul smelling or sputum that is thick like rice gruel indicates a lung abscess. This is due to Heat accumulating in the lung and causing suppuration.

### 3 *Nasal Discharge*

Clear and watery nasal discharge is mostly due to exogenous Wind-Cold.

Chronic and clear discharge accompanied by nasal blockage and sneezing indicates hypersensitive rhinitis. This is mostly due to deficiency of lung-Qi and failure of defensive Qi to protect the body, thereby enabling exogenous Wind and Cold to attack the body.

Turbid and viscous nasal discharge is mostly seen in illnesses of exogenous Wind-Heat. If this becomes chronic it is mostly sinusitis. If the discharge is yellow and foul smelling as well it suggests Heat in the lung meridian. If it is like pus and especially foul smelling it is mostly due to gallbladder Heat transmitting to the brain.

If the discharge is bloody and especially foul and is accompanied by emaciation then it is suspicious of cancer.

### 4 *Saliva*

In CM saliva is fluid from the spleen. Therefore by observing abnormalities of saliva the physician can assess the state of the spleen.

Profuse saliva that is thin and clear suggests Cold in the spleen, whereas thick saliva suggests Heat in the spleen.

Uncontrollable salivation is due to deficient spleen-Qi being unable to astringe.

Uncontrollable drooling of saliva accompanied by wry mouth, wry eyes and hemiplegia is due to Wind invasion.

In addition, profuse salivation in small children is often seen in stomach Heat or intestinal worms.

## 5 *Spittle*

This is foamy and sticky saliva spit from the mouth. Saliva is produced in normal persons to moisten the mouth. Excessive saliva, especially if foamy, is abnormal. It is seen mostly in kidney deficiency, stomach Heat or food retention.

## Section 2 Auscultation and Olfaction

### I Auscultation

In CM all sounds are produced principally by Qi action. The process is not only directly related to the speech organ, but is also closely related to the functional activities of the lung, the heart, the kidney and other organs. Normal sounds reflect harmony of the viscera and sufficiency of Qi and blood. When external pathogenic factors invade or the internal organs lose their harmony, a variety of abnormal sounds may be produced because of the various types of evil Qi and pathological changes. Hence, auscultation can not only detect abnormalities of the speech organ but also the pathological changes in the internal organs and the status of evil Qi.

Diagnosis by auscultation includes listening for abnormalities in the voice, the respiratory sounds and the cough.

### 1 *Voice*

Though the voices of healthy persons may differ in volume, pitch, clarity and sharpness because of differences in body constitution and emotional state, they all have natural phonation, smooth tone and clear articulation. Moreover, their speech is coherent. An abnormal voice shows absence of or changes in some of these qualities.

**Changes in the voice** reflect the rise and fall of genuine Qi and are related to the nature of the disease-causing factors. In general, a loud and clear voice in a person who is talkative and restless suggests an illness of exogenous Heat strength. A soft and weak voice in a person who prefers to talk little or to remain silent suggests an illness of deficiency or of Cold. A deep and muffled voice is common in exogenous Wind-Cold illnesses or blockage by internal accumulation of turbid Dampness, and is due to the inability of lung-Qi to ascend properly or to nasal congestion. Hoarseness or loss of the voice may be sudden or gradual. Sudden hoarseness or voice loss

is mostly due to an exogenous evil attacking the lung and preventing its Qi from rising. Gradual hoarseness or loss is mostly due to internal injury caused by deficiency of lung-Yin and kidney-Yin, and consequent failure of body fluids to flow upward. In a patient with a severe chronic illness, sudden hoarseness is a danger sign of impending collapse of visceral Qi.

**Incoherent speech** is mainly heard in abnormal states of the mind. Its chief categories are raving, muttering to one self, delirium and stammering. Raving is rude, loud and incoherent speech punctuated by cursing and shouting. It occurs mainly in madness caused by Phlegm-Fire disturbing the mind or Fire trapped in the liver and the gallbladder. Muttering to oneself typically consists of incomplete sentences, interruptions and repetitions. It occurs mainly in psychosis caused by deficiency of heart-Qi so that the heart cannot nourish the spirit. Delirium and stammering both occur mainly when the patient is in a state of mental confusion, and are critical signs. Delirious speech is senseless but loud, and is accompanied by high fever and mental confusion. It is mainly due to strong Heat disturbing the heart and mind. Stammering, in this context, is weak and confused speech punctuated by interruptions and repetitions; it occurs mainly in illnesses of deficiency in which heart-Qi is severely damaged so that there is fragmenting of the mind and spirit.

## 2 *Respiratory Sounds*

The lung governs Qi and controls respiration. The kidney governs the acceptance of Qi. These two organs together regulate respiratory functions, so that abnormalities of respiration mainly reflect dysfunction of the lung and the kidney. The main respiratory abnormalities are dyspnea, wheezing, shortness of breath and sighing.

**Dyspnea** is rapid and labored respiration, often with a sense of urgency. In severe cases, there is gasping for air with open mouth, flaring nose and lifting of shoulders; and the patient refuses to lie down flat. Dyspnea may be of deficiency or strength type. In the strength type dyspnea begins abruptly. The breathing is loud, coarse and rapid, with a sense of relief upon exhalation. The strength type of dyspnea is mainly caused by strong exogenous pathogenic evil blocking the lung or turbid Phlegm impeding the lung. In the deficiency type dyspnea appears gradually and becomes chronic. The breathing is weak and slow, with a sense of relief upon inhalation. The deficiency type of dyspnea is mainly due to damage and depletion of lung-Qi and inability of the kidney to accept Qi.

**Wheezing** is rapid respiration with whistle-like gurgling in the throat. It has two main causes. One is the Cold evil invading the lung and activating dormant Rheum. The other is Phlegm-Heat accumulating in the lung, so that lung-Qi cannot rise and Qi and Phlegm battle each other. Wheezing is often accompanied by dyspnea.

If the patient breathes feebly and shallowly, with a soft sound, but appears natural, the patient is said to have shortness of breath. It is a sign that genuine Qi is deficient and the body is weakened.

**Sighing** often occurs when lung-Qi is stagnant or the patient is emotionally dissatisfied or depressed. The patient has a sensation of fullness and oppression in the chest, which can be momentarily relieved by taking a deep breath and letting it out.

### 3 *Cough*

Coughing is one the main symptoms of lung diseases. The pathology of coughing is somewhat complex, but in any illness Cold–Heat and deficiency–strength can be differentiated by the sounds of the cough and the accompanying symptoms.

If the sound of the cough is heavy and muffled and the sputum is white, the cough is mostly due to exogenous Wind-Cold, so that lung-Qi ascends abnormally in retrograde fashion. If the sound is soft but clear, reflecting hesitant Qi movement, the cough is mostly due to chronic deficiency of lung-Qi, so that its dispersion and depuration functions are impaired. If the sound is low, with yellow and viscid sputum, the cough is due to either Wind-Heat attacking the lung or massive accumulation of Heat in the lung.

A dry cough without sputum in a new illness is mostly caused by exogenous Dryness injuring the lung. A dry cough in a chronic illness is mostly caused by sustained deficiency of lung-Yin.

In an infant, sometimes there may be coughing that comes in fits, each fit consisting of rapidly repeated coughing and is like one long sustained cough followed by inhalation that resembles the whoop of a heron. This is whooping cough, also known as the “hundred-day cough.” It is caused by turbid Phlegm impeding the air passages so that lung-Qi cannot move smoothly.

Spasmodic cough resembling the bark of a dog is commonly heard in diphtheria, also known as “white throat.” It is due to a pestilential poison transmitting internally with Fire attacking the throat.

## II *Olfaction*

Olfaction as a diagnostic method applies to the breath, sweat, sputum and saliva, nasal discharge, urine and feces, vaginal discharge and the odor of the patient’s sickroom. The following are three very common types of abnormal odors.

**Fetid Odor.** This suggests an illness due to strength of the disease evil, usually Heat or Dampness-Heat. If the odor comes from the mouth or vomitus it is mostly due to Heat in the stomach. If the odor emanates from the body, consider the possibility of gangrene. If it comes from the feces, accompanied by abdominal pain and a

rapid pulse, it is due to Dampness-Heat in the large intestine moving downward. In a woman, if the odor comes from vaginal discharge that is yellow-green with red streaks it is uterine putrefaction. This is often seen in cancer of the uterus.

**Fish-Stench Odor.** The fish-stench odor is usually found in internal abscesses and illnesses of Cold-Dampness and deficiency Cold. Bloody and purulent sputum with fish-stench odor is due to lung abscess. Vomitus with blood and pus and fish-stench odor is due to stomach abscess. Loose feces with fish-stench odor are due to deficiency Cold of the spleen and the stomach. Vaginal discharge with fish-stench odor that contains much white curds is due to downward flow of Cold-Dampness.

**Specific Odors.** In certain illnesses patients may emit certain specific odors. Appreciation of such odors assists in their diagnosis. For example, a rotten-apple odor in the patient's mouth or body is characteristic of diabetes. A urine-like body odor indicates interior attack by water-Qi (severe water retention); this is a danger sign of imminent collapse of Qi of the visceral organs and is especially common in loss of kidney functions and uremia. An odor of alcohol in the mouth and nose is usually due to indulgence in alcohol or internal accumulation of Dampness-Heat. An odor of blood in the sickroom indicates that the patient has had massive blood loss, such as hemoptysis, hematemesis, hematochezia, and post-partum hemorrhage.

## Section 3 Pulse-Taking and Palpation

### I Pulse-Taking

Pulse diagnosis is the technique of using the finger to palpate the patient's pulse and to ascertain its profile in order to assess the illness and the general condition of the patient. It is a unique feature and very important part of diagnosis in CM.

#### *1 Formation of Pulse*

The pulse is directly linked to the Qi and blood and functions of the visceral organs. The heart governs the meridians, and the regular beating of the heart propels blood to flow in the vessels. In response the arteries also pulsate regularly. The pattern and the configuration of the pulsation of these beats together constitute the pulse.

In CM the circulation of blood depends upon the coordinated actions of other internal organs in addition to the heart. Lung-Qi acts to distribute blood, spleen-Qi keeps blood within the vessels, liver-Qi regulates its circulation, kidney-Qi supports its movement and thoracic Qi provides the motive force.

## 2 Clinical Significance of Pulse-Taking

Because of the direct relationship between the pulse and the visceral organs, the ampleness or deficiency of visceral Qi and blood is reflected in the profile of the pulse. Examination of the pulse can provide information on the location of illness, its nature, the relative rise and fall of evil Qi and genuine Qi, and prognosis. It provides part of the basis for treatment.

## 3 Location of Pulse-Taking

In the past CM used a number of approaches to the examination of the pulse, but only one is in common use today. This approach uses the radial artery at the wrist. Both wrists are used.

Three adjacent positions at each wrist are used. These are the *guan*, the *cun* and the *chi*. The *guan* is at the part of the radial artery directly medial to the styloid process. The other two positions use the *guan* as reference. The *cun* is slightly distal to it and the *chi* is slightly proximal (Fig. 8.3). These six positions (three at each wrist) are related to the visceral organs, as shown in Table 8.8.

## 4 Pulse-Taking Technique

### i Time

The best time for taking the pulse is in early morning, when both the external and internal conditions of the patient are relatively quiet and his Qi and blood calm. At this time the pulse profile can more accurately reflect the state of the *zang-fu* organs, and the condition of the Qi and the blood.

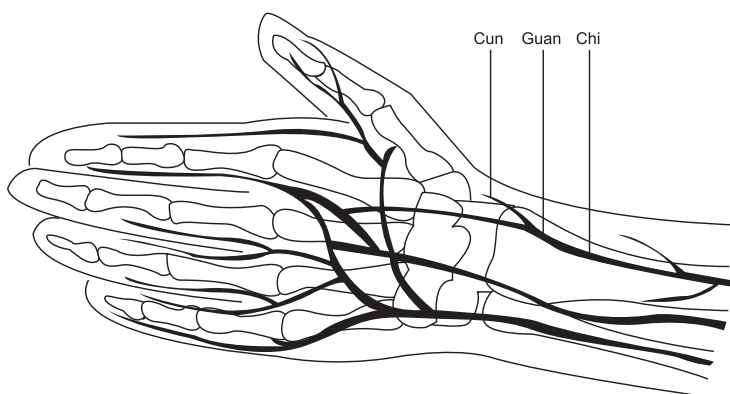
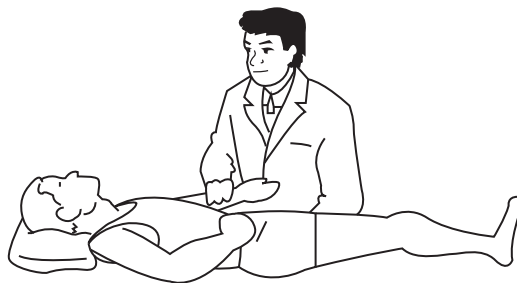


Fig. 8.3 Positions for pulse-taking

**Table 8.8** Correlation of pulse position with *Zang* organs

Pulse Position	<i>Zang</i> Organ
Left <i>cun</i>	Heart
Right <i>cun</i>	Lung
Left <i>guan</i>	Liver
Right <i>guan</i>	Spleen
Left <i>chi</i>	Kidney
Right <i>chi</i>	Life Gate

**Fig. 8.4** Postures for pulse-taking

Since the physician cannot always choose the time, the pulse may be taken at any time with satisfactory results provided the examination room is relatively quiet and the physician is calm and attentive.

## ii Patient Posture

The patient should sit up straight or lie down in a supine position (Fig. 8.4). Place the arm so that the wrist is at the same level as the heart. The wrist should be straight with the palm facing upward. A small pillow under the wrist helps to make the patient more comfortable.

## iii Palpating the Pulse

Sit opposite the patient. Use the left hand to take the pulse in the right wrist, and the right hand to take the pulse in the left wrist. Place the middle finger on the *guan* position of the radial artery, and the index and ring fingers on the *cun* and *chi* positions respectively. The three fingers should be somewhat curled like a bow in order to keep the fingertips at the same level and constantly on the pulse.

The spacing between the three fingers should be adjusted according to the height of the patient. For tall patients separate the fingers slightly, and for short patients squeeze them together slightly. For a small child, use the thumb alone.

Three levels of pressure should be used in taking the pulse. Using a light force is called “touching.” Using a moderate force is called “searching.” Using sufficient force to reach the underlying bone and tendons is called “pressing.” For complete examination of the pulse all three levels should be used and attention paid to changes in the pulse profile in response to these manipulations.

No less than 1 min should be spent examining the pulse. Several minutes may be necessary.

## 5 Normal Pulse

The normal pulse has the following profile: it is equally palpable at all three positions (*cun*, *guan*, *chi*); its pulsation comes and goes evenly and is moderate in force; and it has a regular rhythm and an even rate, 60–90 per min.

The pulse profile may vary in response to external and internal influences on the body. For example, in a baby the normal pulse has a faster rate than that of an adult, and in a woman it has a slightly faster rate than that of a man. In summer, because of the higher ambient temperature the blood vessels dilate and blood flows faster, so that the pulsation comes more vigorously and goes gently. In winter, because the ambient temperature is lower the vessels constrict and the pulse is deeper. In a thin person the pulse is more superficial, whereas in a fat person the pulse is deeper.

## 6 Abnormal Pulses

A pulse may be abnormal because of its depth, rate, rhythm, volume or force. The clinical correlates of these abnormal pulses are summarized in [Table 8.9](#).

### i Pulses of Abnormal Location

Abnormal location in this context refers to the depth at which the pulse is palpable, and the length of radial artery over which it is palpable. The profile of a normal pulse is that it is palpable at all three positions of *guan*, *cun*, and *chi*, and at a depth that is neither superficial nor deep. The main abnormal pulses are as follows.

**Floating Pulse** The floating pulse is palpable at a superficial depth, requiring only light touching. With increased pressure the pulse shows a diminution in the force of its pulsation, but there is not an empty feel. The ancients used the metaphor of “wood floating on water.”

*Clinical Significance* A floating pulse indicates an illness in the exterior and is mostly seen in the initial stages of an exogenous illness. A floating but forceless pulse indicates an illness of deficiency in the exterior, mainly a contagious febrile

Table 8.9 Clinical correlates of pulses in abnormal location

Pulse	Characteristics		Analysis	Clinical Significance
Floating	Floating and feeble	Just below surface, felt with light touch; becomes faint on pressing but does not feel hollow	Defensive Yang expels evil Qi and keeps meridian Qi in exterior; Deficient genuine Qi allows weak Yang to float, producing floating and feeble pulse	Deficiency illness in exterior, with fever and sweating; or, exogenous illness in physical condition of Yang deficiency
		Floating and forceful		Strength illness in exterior, with fever and little sweating
	Floating and rapid			Exogenous Heat illnesses in exterior
	Floating and tense			Endogenous Cold illnesses in exterior
Soft pulse	Superficial, forceless, threadlike		Deficient Yin-blood → vessels not full and Yang-Qi floating; and accumulated Dampness blocking vessels	Illness of either deficiency (Qi, blood, fluids) or Dampness;
				Dampness in exterior or spleen insufficiency with strong Dampness
Hollow pulse	Superficial, large but feeble		Deficiency of Yin, blood and essence so that Yang-Qi floats to surface and vessels are not full	Massive blood loss or severe damage to Yin; also kidney insufficiency with spermatorrhea
Tympanic pulse	Superficial, large, hollow but hard		Floating of Yang-Qi due to Yin-blood insufficiency	Blood loss, spermatorrhea; usually patients over the middle age with deficiency and exhaustion of Yin-blood
				(continued)

Table 8.9 (continued)

Pulse	Characteristics	Analysis	Clinical Significance
Deep pulse	Deep and forceful	Requires pressing to palpate distinctly	Deep/forceful: strength illnesses in interior; with trapping of Qi and blood Deep/weak: depleted genuine Qi unable to propel blood
Firm pulse	Deep and weak	Deep, slightly taut, long, large, and forceful	Internal deficiency illnesses Accumulation of Yin-Cold, submergence of Yang-Qi (pain, hernia, abdominal tumor)
Sunken pulse	Deeper than deep, threadlike and feeble		Danger sign, suggesting pathogenic evils barricading interior; syncope, shock or severe pain
Short pulse	Short and forceful	Distinctly palpable at only <i>guan</i> position	Qi disorder Strength illnesses with strong Qi
Long pulse	Short and weak	Normal: long, gently elastic; Abnormal: long and taut	Weak propulsion by deficient Yang-Qi; impeded blood flow Severe Qi deficiency due to many conditions Strong evil Qi

illness with much sweating, or attack by exogenous evil in physical condition of Yang deficiency. A floating but forceful pulse indicates an illness of strength in the exterior, mainly a contagious febrile illness without sweating. A rapid floating pulse suggests an exogenous Heat illness in the exterior. A tight floating pulse suggests an exogenous Cold illness in the exterior.

A floating pulse is also seen in a patient weakened by chronic illness so that Yang-Qi floats to the exterior of the body. In such a case the pulse is characteristically floating and forceless.

In addition, the pulse may become floating in a patient taking certain drugs to dilate the airways. In this case the floating characteristic is transient.

*Analysis* The principal factor in the formation of a floating pulse is exogenous evil Qi. When evil Qi attacks, Nutritive Yang resists it and excites meridian Qi in the exterior; hence the floating pulse. If genuine Qi is deficient and weakened Yang-Qi floats to the exterior, the pulse may also become floating; in that case it is forceless.

**Soft Pulse** The soft pulse has three characteristics: floating, soft and threadlike.

*Clinical Significance* A soft pulse indicates an illness of deficiency or of Dampness – principally Qi deficiency, severe blood insufficiency, spermatorrhea, diarrhea, spontaneous sweating, severe fright, Dampness attacking the exterior or strong Dampness in spleen insufficiency. It can also occur in contagious illnesses of the stomach and intestines.

*Analysis* The development of the soft pulse in an illness of deficiency is due to insufficiency of Yin-blood so that Yang-Qi cannot be restrained. This causes the vessels to become partially empty and Yang-Qi to float to the exterior; hence the soft pulse. Internal accumulation of Dampness also causes blockage of the vessels, hence also the development of a soft, threadlike and floating pulse.

**Hollow Pulse** A hollow pulse is superficial and is easily palpated with a light touch. It is large but feeble, so that it feels empty even with gentle pressure. However, the vessel does have a measure of hardness, as though palpating the stalk of scallion.

*Clinical Significance* A hollow pulse indicates either massive blood loss or severe damage to Yin. The massive blood loss may be due to hematemesis, melena or hematochezia, metrorrhagia, hematuria, or trauma. Severe damage to Yin may be due to vomiting and diarrhea, profuse sweating, or high fever. In addition, a hollow pulse can occur in kidney insufficiency with spermatorrhea.

*Analysis* The hollow pulse is principally due to deficiency of Yin, blood and essence in the interior, so that Yang-Qi loses its anchor and floats to the exterior. Because of deficiency of Qi, blood and essence the vessels cannot reach fullness, thus producing the feel of hollowness. Because of the floating of Yang-Qi to the exterior the pulse is superficial in location.

**Tympanic Pulse** This pulse is superficial requiring touching only, very large, and hollow but hard. It is so named because palpating it resembles touching a drum.

*Clinical Significance* A tympanic pulse indicates blood loss or spermatorrhea. It usually occurs in a patient over the middle age, most commonly in an illness of deficiency and exhaustion. Other conditions causing partial fullness of the vessels include bleeding, such as hemorrhage during labor, or moderately severe fluid loss – these conditions can all show a tympanic pulse.

*Analysis* The processes that produce the tympanic pulse are the same as those that produce the hollow pulse – deficiency of Yin-blood with floating of Yang-Qi to the exterior. The tympanic pulse and the hollow pulse are both floating and hollow. The chief difference between them is the degree of hardness of the vessel. The tympanic pulse is forceful as though feeling a drum, indicating that the vessel is relatively hard. The hollow pulse is forceless, as though pressing on the stalk of scallion, indicating that the vessel is relatively soft.

**Deep Pulse** The deep pulse cannot be palpated by touching and only faintly by searching. Distinct pulsation can be felt only by pressing.

*Clinical Significance* A deep pulse indicates an illness of the interior. A deep and forceful pulse indicates an illness of evil strength in the interior, mostly accumulation of Phlegm–Rheum, food retention, Qi impedance, internal blockage by Cold, blazing endogenous Heat. A deep and weak pulse indicates an illness of interior deficiency, mostly deficiency of Yin or Qi.

Note that a deep pulse is very common in obese patients with thick subcutaneous adipose tissues. In such patients it does not indicate an illness.

*Analysis* The deep pulse in an interior strength illness is the result of the struggle between evil Qi and genuine Qi in the interior so that Qi and blood are trapped in the interior. This leads to a pulse that is deep and forceful. In an interior deficiency illness genuine Qi is depleted and thus unable to motivate meridian Qi. In this case the pulse becomes deep and weak.

**Firm Pulse** The firm pulse has these features: deep, taut, long, large and forceful. It can be palpated only by pressing.

*Clinical Significance* A firm pulse signifies accumulation of Yin-Cold and submergence of Yang-Qi. It can be seen in hernia, abdominal tumor, or any severe pain. Clinically, it also occurs in hardening of the arteries and chronic nephritis.

*Analysis* When Yin-Cold accumulates in the interior Yang-Qi submerges and meridian Qi hides; hence the pulse is deep and its pulsation strong, large and long. In chronic nephritis or hardening of the arteries, the elasticity of the blood vessels is diminished but the lumen is full. This raises the blood pressure, hence a firm pulse.

**Sunken Pulse** This is even deeper than the deep pulse. To palpate it requires more force than pressing, to the point of reaching the underlying tendon or bone. Even then the pulse is threadlike and feeble. Sometimes no pulsation is palpable.

*Clinical Significance* This pulse is a danger sign. It indicates that the pathogenic evil is so strong that it barricades the interior. It is also seen in syncope or extreme

pain, cardiac shock, lung inflammation with shock, toxic dysentery, or massive bleeding.

*Analysis* When evil Qi is barricaded in the interior meridian Qi cannot move freely but is suppressed; hence the location of the pulse becomes very deep. Severely deficient genuine Qi is too weak to activate pulsation; hence it also leads to a sunken pulse.

**Short Pulse** A short pulse is one that is palpable only at the *guan* position. At the *cun* and *chi* positions it is absent, or if present barely and indistinctly palpated.

*Clinical Significance* A short pulse indicates an illness of Qi. A short but forceful pulse indicates that Qi is strong, whereas a short but weak pulse indicates Qi deficiency. The latter may be due to Yang collapse, Qi depletion, massive blood loss, accumulation of turbid Phlegm, food retention, and blood stasis.

*Analysis* The pulsation of the artery is due to propulsion by Qi. If Yang-Qi is weak and unable to propel blood flow, then blood flows slowly and the vessels become resistant. In such conditions the pulse becomes short and weak. The pulse may be short also in Phlegm accumulation, food retention, blood stasis and Qi impedance. These conditions cause impedance or blockage of the vessels and a short pulse is the result.

Narrowing of the arteries means that the inflow of Qi and blood into the vessels is impeded, so that the vessels cannot be filled to the full. Hence the pulse is threadlike and weak. The blood also flows slowly, hence the short pulse.

**Long Pulse** The long pulse may be normal or abnormal.

*Clinical Significance* If the pulse is long and gently elastic it is normal and indicates ample Qi and blood and free movement of meridian Qi. If it is long and taut it is abnormal and indicates strong evil Qi. The most common causes are liver-Fire, adverse Qi flow, Phlegm-Heat, epilepsy, hernia and constipation.

*Analysis* In a healthy person genuine Qi is ample and all the meridians are unimpeded. That produces a long and gently elastic pulse. But if there is liver-Fire, turbid Phlegm, endogenous Heat or adverse Qi movement, then blood flow may be accelerated and the vessels are beyond normally full. That produces a long and taut pulse.

## ii Pulses of Abnormal Rate

There are two main categories of abnormal pulse rate: fast and slow. Traditionally, the pulse rates of a patient could be recorded through counting the number of inhalation of the CM practitioner. In a normal adult, four beats of pulse are revealed during one intake of breath of the CM practitioner. However, nowadays we can count the pulse with a watch. A fast pulse is one that is faster than 90 beats per min. Clinically, there are three frequently seen types of fast pulse: rapid, swift, and boiling bubbles. A slow pulse is one that is slower than 60 beats per min. Clinically, there are two

frequently seen types of slow pulse: slow, and leaky-roof. The clinical correlates of pulses of abnormal rate are summarized in [Table 8.10](#).

**Rapid Pulse** This is a fast pulse with a regular rhythm. Its rate is generally in the range of 90–139 beats per min.

*Clinical Significance* A rapid pulse can mean two things. One is an illness of Heat. A rapid and forceful pulse indicates an illness due to strength of the Heat evil. A rapid and floating pulse indicates Heat in the exterior. A rapid and deep pulse indicates Heat in the interior. The other is an illness of deficiency, in which the pulse may be rapid but is always weak. Thus, a rapid and weak pulse indicates deficiency Heat.

The most common illnesses showing a rapid pulse are those of exogenous Heat, Heat in the stomach, Heat in the intestines, Fire in the liver, Fire in the heart, as well as deficiency of Yin, blood, Yang or Qi.

*Analysis* The pulse is rapid in Heat diseases whether it is due to strength of the Heat evil or to deficiency of Yin permitting Fire. In either case, the blood flows more rapidly, hence a rapid pulse. The mechanism is different for the rapid pulse of Qi or Yang deficiency. In those cases, deficient Yang-Qi cannot consolidate but escapes to the exterior.

**Swift Pulse** The rate of a swift pulse is in the range of 140–180 beats per min. The rhythm is basically regular.

*Clinical Significance* A swift pulse indicates excessive Yang and depleted Yin, with genuine Qi on the verge of exhaustion. A swift and taut pulse indicates blazing Yang-Heat and depletion of Yin-fluids, which occurs in the severe or risk cases. A swift but feeble pulse indicates depletion of Yang-Qi.

*Analysis* The pulse becomes swift principally because genuine Yin is on the verge of exhaustion so that unopposed Yang rises without restraint or because extreme Yang-Heat causes blood to flow rapidly.

**Boiling Bubbles Pulse** The rate of this pulse is generally above 180 beats per min, but the beats are often too indistinct to be counted accurately, which is a sign of the severity of the illness. The pulse is palpable by light touching. The ancient physicians used the metaphor of the bubbling of boiling water with bubbles that float but have no root.

*Clinical Significance* A boiling bubbles pulse indicates that Yang-Heat is extreme and Yin-fluid has dried. This is a danger sign.

*Analysis* Extreme Heat in the three Yang meridians causes blood to flow very rapidly. As Yin-blood dries, the vessels become less and less filled; hence, the pulse becomes floating and feeble.

**Leaky Roof Pulse** The rate of this pulse is very slow, often in the range of 21–40 beats per min. It resembles water drops dripping from a leaky roof, a drop now and then and without force. The rhythm may be regular or completely irregular.

Table 8.10 Clinical correlates of pulses of abnormal rate			
Pulse	Characteristics	Analysis	Clinical Significance
Rapid pulse	Rapid, floating	Exogenous Heat or endogenous heat due to Yin-deficiency, accelerating flow of Qi and blood; or, Yang-Qi floating to the exterior	Exogenous or endogenous Heat
Swift pulse	Rapid, deep		Endogenous Heat due to Yi-deficiency
	Rapid, weak		Deficiency of Yin and blood, or Yang or Qi
	Swift and taut pulse	Rate 140–180 beats per min with regular rhythm	Hyperactive Yang-Heat and Exhaustion of Yin-fluid
Boiling bubbles pulse	Swift and feeble pulse		Depletion of Yang-Qi
		Rate over 180 beats per min; feeble, floating	Extreme Heat in Yang meridians accelerates blood

(continued)

Table 8.10 (continued)

Pulse	Characteristics	Analysis	Clinical Significance
Leaky roof pulse		flow; exhaustion of Yin-blood leads to empty vessels	Hyperactivity of Yang-heat and exhaustion of Yin-fluid
	Rate 21–40 beats per min; rhythm may be regular or absent	Deficient stomach-Qi, nutritive Qi and defensive Qi →imminent collapse of meridian Qi → no motive force for blood circulation	Exhaustion of stomach-Qi, nutritive Qi, seen usually in serious arrhythmia and other illnesses
Slow pulse	Rate 40–60 beats per min with regular rhythm	Cold impeding flow of Yang-Qi and blood; gelled Heat can also impede Qi circulation	Cold; strong Yin-Cold in interior or deficiency of Yang-Qi; Heat in Nutritive and Blood Levels of the warm illnesses

*Clinical Significance* The leaky roof pulse indicates complete collapse of stomach-Qi and nutritive Qi. It is a sign of imminent death. This pulse can be seen in a variety of rheumatic valvular illnesses of the heart, severe coronary artery illness with advanced hardening, advanced cardiomyopathy (abnormality of the heart muscle), or markedly high blood potassium levels.

*Analysis* When stomach-Qi, nutritive Qi and defensive Qi collapse, complete exhaustion of meridian Qi is imminent. There is then no motive force for circulation, and the leaky roof pulse is the result.

**Slow Pulse** The rate for a slow pulse is in the range of 40–59 beats per min. The rhythm is basically regular.

*Clinical Significance* A slow pulse indicates an illness of Cold. A slow and forceful pulse indicates a Cold strength illness. A slow and weak pulse indicates an illness of deficiency Cold, most commonly accumulation of Yin-Cold or deficiency of Yang-Qi.

A slow pulse can occur in Heat illnesses, principally when Heat is barricaded in the stomach and intestines or Heat is in the Nutritive and Blood Levels of the warm diseases.

Note that a slow pulse may be seen in normal healthy persons, especially athletes or those who regularly engage in physical labor.

*Analysis* The slow pulse occurs in illnesses of Cold because Cold causes impedance of Qi. When Yang-Qi is impeded blood circulates more slowly, resulting in a slow pulse. In an illness of Heat, gelling of Heat can also impede Qi movement and produce a slow pulse.

### iii Pulses of Abnormal Rhythm

The most common pulses of abnormal rhythm are the following: hurried, hesitant, intermittent, bird-peck, and rope-unraveling pulses. The clinical correlates of pulses of abnormal rhythm are summarized in [Table 8.11](#).

**Hurried Pulse** This is an overall rapid pulse with irregular intervals of missing beats.

*Clinical Significance* The hurried pulse is seen in two major types of illnesses. In one, Yang-Heat is strong. In the other, the *zang-fu* viscera are insufficient. A hurried pulse that is forceful suggests strong Yang-Heat and barricading of the pathogenic evil. A hurried pulse that is feeble suggests insufficiency and decline of the visceral organs.

*Analysis* When Yang-Heat is strong blood circulates faster; hence the pulse is rapid. However, because of stagnation of Qi, blood, Phlegm and food impeding blood flow, there are intervals during which there is no pulsation. In insufficiency and decline of the viscera Yang-Qi dissipates to the exterior, so that Yin and Yang no longer

**Table 8.11** Clinical correlates of pulses of abnormal rhythm

Pulse		Characteristics	Analysis	Clinical Significance
Hurried pulse	Forceful hurried pulse	Overall rapid, irregular intervals without beats	Strong Heat accelerates blood circulation, stagnation of Qi and blood induces intervals without pulsation	Strong Yang-Heat, barricading of evil Qi
	Feeble hurried pulse			Deficiency of <i>zang-fu</i> organs, Qi stagnation and blood stasis
Hesitant pulse		Slow rate with irregular intervals without beats	Impeded blood circulation	Excess Yin stagnating Qi, blood stasis due to Cold-Phlegm, food retention, insufficiency of visceral organs with deficiency of Qi and blood
Intermittent pulse		Otherwise regular beats pausing at regular intervals	Depletion of visceral Qi → deficiency of Qi and blood; or, disruption of Qi by trauma, pain, fright	Insufficiency of viscera; fright, trauma, and pain syndromes; stagnation of Qi and blood stasis
Bird-peck pulse		Group of 3–5 rapid beats alternating with long stretch without beats	Discontinuous meridian Qi and unfilled meridians	Imminent total exhaustion of spleen and stomach Qi in severe cases
Rope-unraveling pulse		Irregularly irregular rate, rhythm, force; overall rate 90–130 beats per min	Disruption of meridian Qi due to exhaustion of kidney Qi and Vital Gate Qi	Exhaustion of the Qi of kidney and Vital Gate

succeed each other. Because of this the pulse is also rapid with intervals without pulsation, but in addition the pulse is feeble.

**Hesitant Pulse** The hesitant pulse has an overall even or slow rate, but like the hurried pulse there are irregular intervals without pulsation. The hurried and the hesitant pulses differ principally in their overall rates.

*Clinical Significance* A hesitant pulse suggests such conditions as vigorous Yin with stagnated Qi, Cold-Phlegm with blood stasis, and abdominal mass with food retention. It also suggests insufficiency and decline of the visceral organs, with deficiency of both Qi and blood. The latter is common in diseases of the heart.

*Analysis* Two factors contribute to the formation of the hesitant pulse. One is impedance of blood circulation due to Qi stagnation, blood stasis, turbid Phlegm accumulation, or food retention. The impedance of blood circulation leads to a slow, or at best even, rate with intervals without beats. The other factor is deficiency of Qi and blood due to visceral insufficiency, and this condition also leads to impedance of blood circulation, hence a hesitant pulse.

**Intermittent Pulse** In this pulse the regular beats abruptly pause for several beats and just as abruptly resume. The stopping comes at regular intervals.

*Clinical Significance* An intermittent pulse suggests principally depletion of visceral Qi and secondarily severe pains, fright or trauma.

*Analysis* Depletion of visceral Qi leads to deficiency of Qi and blood, so that blood circulation loses its motive force. This causes the periodic pauses. Sudden fright, trauma and severe pains can all cause chaotic movement of meridian Qi, with periodic discontinuation of beats.

**Bird-Peck Pulse** The bird-peck pulse has two principal characteristics: a group of rapid beats, variable in number, sometimes three and sometimes five; this is abruptly followed by absence of beats for a long while. This pattern of a group of beats followed by inactivity is repeated continually. The ancients used the metaphor of a bird searching and pecking at food.

*Clinical Significance* The bird-peck pulse signifies that spleen and stomach Qi is on the verge of total exhaustion. This is also a danger sign.

*Analysis* The spleen and the stomach are the source of Qi and blood transformed from food and drink, hence the root source of meridian Qi and even the entire body. When the spleen and the stomach fail, Qi and blood lose their source. Consequently, the meridians are unfilled and meridian Qi becomes discontinuous.

**Rope-Unraveling Pulse** In this pulse the beats come irregularly, sometimes fast and sometimes slowly, and its force varies irregularly, sometimes forceful and sometimes weak. There is no pattern to the irregularities. The overall rate tends to be in the range 90–130 beats per min.

*Clinical Significance* The principal condition is exhaustion of the Qi of the kidney and the Vital Gate.

*Analysis* The kidney and the Vital Gate are the foundation of the human body and the source of meridian Qi. Exhaustion of kidney and Vital Gate Qi leads to discontinuity in meridian Qi. As a result the pulse comes at irregular rates and with variable force.

#### iv Pulses of Abnormal Volume

Volume in this context refers to the width and length of the beat and in association with length the sharpness of the coming and the going of the beat.

There are seven types of pulses in this category: surging, threadlike, slippery, impeded, taut, tense, and moderate pulses. The clinical correlates of pulses of abnormal volume are summarized in [Table 8.12](#).

**Surging Pulse** The surging pulse has a large volume, like the tide or a strong wave. It comes in a strong surge but recedes moderately.

*Clinical Significance* The surging pulse suggests strong Yang-Heat. In exogenous illnesses the surging pulse is seen mostly at the stage of strong Heat in the Yangming Meridian or the Qi Level (see Volume 1, Part II, Chapter 9, [Sections 4](#) and [5](#)). It is also seen in endogenous Heat in the visceral organs, intestinal abscess, and lung abscess. In a patient who has been ill for a long time, so that genuine Qi has declined, the appearance of a surging pulse is a danger sign that the remnant Yang is on the verge of dissipation. In this last case, though the pulse is tide-like it is not forceful on pressure.

*Analysis* Strong Yang-Heat is the principal factor leading to the formation of the surging pulse. Because evil Qi is strong the struggle between genuine Qi and evil Qi is intense, Qi and blood are more than ample, and the blood vessels expand. In such circumstances the pulsation comes in surging and goes out somewhat more slowly.

**Threadlike Pulse** This pulse has a very small volume, but can be palpated distinctly. The ancient physicians compared it to a silk-thread.

*Clinical Significance* The threadlike pulse is seen in two main groups of illnesses. One group comprises illnesses of deficiency, including depletion of both Qi and blood and insufficiency of Yin-fluids. Loss of Yin-fluids may result from acute severe Heat illnesses or chronic illnesses with Yin-deficiency, blood loss, profuse sweating, spermatorrhea, vomiting or diarrhea. The other group comprises illnesses of Dampness. Whenever Dampness encumbers the spleen or blocks meridians the pulse may become threadlike.

*Analysis* In either depletion of both Qi and blood or insufficiency of Yin-fluid the blood vessels are not amply filled, so that a threadlike pulse may result. The Dampness evil is viscous, leading to blockage of blood circulating in vessels. When it presses the vessels they also become thin, hence the threadlike pulse in such a condition.

**Slippery Pulse** In this pulse the pulsation comes and goes as though greased, like beads rolling on a smooth plate.

*Clinical Significance* A slippery pulse suggests accumulation of Phlegm–Rheum, food retention or strong Heat, or pregnancy. It can be seen in any of the following: whenever there is fever due to strong Heat evil in the interior; when there is jaundice, dysentery, diarrhea, dysuria, or food retention inducing abdominal distention and

**Table 8.12** Clinical correlates of pulses of abnormal volume

Pulse		Characteristics	Analysis	Clinical Significance
Surging pulse		Large volume; surges forward, goes gently	Intense struggle between evil Qi and genuine Qi; ample Qi and blood expand vessels → tide-like pulsation	Strong Yang-Heat in Yangming Meridian or Qi Level; chronic illness with depletion of genuine Qi
Threadlike pulse		Thin like silk thread but distinctive on pressure	Depletion of Qi, blood, Yin-fluids → poorly filled vessels; squeezing of blood vessels by Dampness	Any severe insufficiency of Yin-fluids; Dampness encumbering spleen or meridians
Slippery pulse		Beats come and go smoothly	Ample genuine Qi in face of strong illness Qi; plentiful Qi and blood	Accumulation of Phlegm–Rheum, food retention, or strong Heat. Also healthy persons and pregnant women
Impeded pulse	Impeded and forceful	Each pulsation is sluggish both coming and going	Sluggish blood flow due to deficient Qi and blood, Qi stagnation, blood stasis, or blockage by Phlegm	Strength illness with stagnation of Qi, stasis of blood, retention of food or blockage by Phlegm
	Impeded and feeble			Deficiency of Qi and blood, impairment of Yin and exhaustion of body fluids
Taut pulse		Forceful, long and straight, smooth	Tension in blood vessels	Variety of liver illnesses, Phlegm–Rheum accumulation, severe pain, malaria, and hypertension
Tight pulse		Beats come and go with force like a twisted rope	Cold causes blood vessels to contract, tighten and tense up	Exterior Cold illness, interior Yin-Cold with water retention,

(continued)

**Table 8.12** (continued)

Pulse	Characteristics	Analysis	Clinical Significance
			acute and severe pain, food retention
Even pulse	Normal pulse; may be abnormal when associated with other features	See analysis for associated features	Abnormal even pulses mainly in illnesses of Dampness or of spleen insufficiency

constipation; or when there is accumulation of Phlegm–Rheum inducing labored breathing or vomiting.

*Analysis* In these conditions evil Qi is strong in the interior but genuine Qi is ample with plentiful Qi and blood. Hence the pulsation is smooth coming and going.

*Note* A slippery pulse can also be seen in healthy persons and in otherwise healthy pregnant women.

**Impeded Pulse** Each beat comes and goes in a hindered or sluggish manner.

*Clinical Significance* Impeded pulses may be forceful or feeble. An impeded and forceful pulse indicates evil strength, usually with Qi stagnation, blood stasis, food retention, or blockage by Phlegm. An impeded and feeble pulse indicates deficiency, usually deficiency of Qi or blood, impairment of Yin or exhaustion of body fluids.

*Analysis* When Qi and blood are both deficient the blood vessels are not full and blood flows sluggishly. In these circumstances the pulse is not only impeded but also feeble. In an illness with Qi stagnation, blood stasis, food retention or blockage by Phlegm due to evil strength, the basic pulse is sluggish but the strong evil Qi makes the pulse forceful as well.

**Taut Pulse** This pulse not only pushes against the palpating finger with force but also is long and straight. The beats come and go smoothly. The ancient physicians used the metaphor of pressing on a taut string on a lute.

*Clinical Significance* Four circumstances give rise to a taut pulse. One comprises illnesses of the liver and the gallbladder due to flaming upward of liver-Fire, trapping of liver-Qi, abnormal ascent of liver-Yang, or Dampness-Heat in the liver and gallbladder. Another comprises illnesses of Phlegm–Rheum. A third is one of severe pain, as in abdominal pain, chest pain or flank pain. The fourth is the disease malaria, which has the taut pulse as its principal pulse. Patients with hypertension are manifested commonly in taut pulse.

*Analysis* Tautness is a manifestation of tension in the vessels. The liver governs dispersion and facilitates Qi movement. If the liver loses its function of dispersion,

Qi movement is disturbed and the pulse becomes taut. In Phlegm accumulation, severe pain and malaria, the dynamic equilibrium of Yin–Yang is disturbed and the meridian Qi becomes tense. In these circumstances the pulse also becomes taut.

**Tight Pulse** In a tight pulse the beats come and go with force, like a twisted rope pulled through the fingers.

*Clinical Significance* A tight pulse suggests either Cold or severe pain. In a patient with an illness due to exogenous Cold, with chills and fever, a floating and tight pulse indicates illness in the exterior. In a patient with accumulation of Yin-Cold in the interior with water retention the pulse is tight and deep. Acute pain, such as cold pain in the abdomen, a joint or the heart, frequently makes the pulse tight. In addition, a tight pulse is seen in food retention in the stomach and intestines.

*Analysis* All illnesses manifesting a tight pulse have to do with Cold. The nature of the Cold pathogenic evil is to contract and gel. This causes the blood vessels to become tense and tight.

**Even Pulse** An even pulse, at a rate of 60–90 beats per min, may be normal or abnormal. In a normal even pulse the beats come and go gently and the pulse is neither superficial nor deep. In an abnormal even pulse the beats come and go lazily and exhibits associated features, such as floating.

*Clinical Significance* Abnormal even pulses are mainly seen in illnesses of Dampness or spleen insufficiency. A floating even pulse suggests Wind-Dampness. A deep even pulse suggests Cold-Dampness. An impeded even pulse suggests spleen or blood insufficiency. A weak even pulse suggests Qi deficiency.

## v Pulses of Abnormal Force

There are five principal pulses of abnormal force: replete, depletive, feeble, indistinct, and scattered pulses. The clinical correlates of pulses of abnormal force are summarized in [Table 8.13](#).

**Replete Pulse** The replete pulse is as follows: the pulse is forceful whether at the *guan*, *cun* or *chi* position; regardless of using touching, searching or pressing to palpate; and it is long and large, giving a feel of fullness.

*Clinical Significance* A replete pulse is a symptom of strength. It can be seen in many illnesses, whether of Cold, Heat, indigestion, Phlegm accumulation, Qi impedance or blood stasis, in which genuine Qi has not declined. Thus, its presence indicates two things: strong evil Qi, and ample genuine Qi.

*Analysis* When both evil Qi and genuine Qi are strong, their struggle is vigorous. Both Qi and blood are ample, so that blood fills the vessels fully and produces a replete pulse.

**Table 8.13** Clinical correlates of pulses of abnormal force

Pulse	Characteristics	Analysis	Clinical Significance
Replete pulse	Forceful, full and long at all depths	Vigorous struggle between evil Qi and genuine Qi; full blood vessels	Ample genuine Qi in variety of strength illnesses
Depletive pulse	Weak and hollow at all positions and all depths	Inadequate meridian Qi or filling of vessels	Deficiency illness of Qi, blood, Yin or Yang
Feeble pulse	Deep, threadlike, soft and weak	Deficient Yin-blood unable to fill vessels and declining Yang-Qi unable to propel blood circulation	Deficient Qi and blood, declining Yin–Yang, other deficiency states
Indistinct pulse	Very thin threadlike; barely, indistinctly palpated	Deficient Yin-blood unable to fill vessels, deficient Yang-Qi unable to propel circulation	Extreme decline of Qi and blood, massive loss of blood or fluids
Scattered pulse	Floating, indistinct, uncountable; irregular rhythm	Exhausted genuine Qi and dissipated Yang-Qi	Danger sign. Exhaustion of genuine Qi; visceral organ failure, other critical conditions

**Depletive Pulse** The depletive pulse is the opposite of the replete pulse. It is weak at all three positions and regardless of the pressure used to palpate it. Moreover, it has a hollow feel.

*Clinical Significance* A depletive pulse indicates an illness of deficiency, whether of Qi, blood, Yin or Yang, or insufficiency of the visceral organs.

*Analysis* When Qi, blood, Yin or Yang is deficient, meridian Qi cannot be adequately supported or the vessels filled. This causes forceless pulsation, hence the depletive pulse.

**Feeble Pulse** This pulse has the following features: deep, threadlike, soft and weak. It is palpable only by pressing deeply.

*Clinical Significance* A feeble pulse indicates deficient Qi and blood and declining Yin–Yang. It is seen in a large variety of deficiency illnesses. It is also seen in

chronic illness, spermatorrhea, blood loss, chronic cough, profuse sweating, diarrhea and vomiting.

*Analysis* Deficient Yin-blood cannot fill blood vessels and declining Yang cannot propel blood circulation. As a result, the pulse becomes deep, threadlike, soft and weak.

**Indistinct Pulse** The indistinct pulse is even smaller and weaker than the feeble pulse. It is felt only indistinctly and cannot be counted.

*Clinical Significance* An indistinct pulse signifies that genuine Qi is extremely deficient. It is seen mostly in depletion of both Qi and blood, complete exhaustion of Yang-Qi, profuse sweating, and massive blood loss. This is a danger sign.

*Analysis* When Yin-blood is deficient it is unable to fill the vessels fully. When Yang-Qi is depleted it loses its ability to propel meridian Qi. As a result the pulse is threadlike, soft, forceless and indistinct.

**Scattered Pulse** The scattered pulse has two characteristics. It is floating, scattered and rootless, so that it can be palpated by light touch but disappears on pressure. Its beats cannot be counted with certainty and its rhythm is irregular, but does not show signs of ceasing.

*Clinical Significance* The scattered pulse is a danger sign, indicating that genuine Qi is exhausted and scattered and the visceral organs have failed. It is seen whenever genuine Qi has dissipated or Qi and blood are both exhausted. It is also seen in general edema with palpitation of the heart, severe cough and dyspnea, or when an abortus is on the verge of delivery.

*Analysis* The scattered pulse primarily reflects total exhaustion and dissipation of genuine Qi, so that Yin–Yang become dissociated and Yang-Qi floats and scatters.

## II Palpation

Palpation is the use of the hands to touch, feel, press and manipulate certain parts of the patient's body in order to discover abnormalities. From these abnormalities the physician infers the location, nature and severity of the patient's illness. Strictly speaking, examination of the pulse is a part of palpation, but because the pulse is so important of itself it is usually discussed separately in CM.

### 1 Palpation of the Skin

The purpose of palpating the skin is to determine whether the skin is cold or hot, moist (well hydrated) or dry (dehydrated), swollen, or otherwise abnormal.

If the skin feels hot initially but becomes less hot with sustained palpation, then Heat is in the exterior. If the skin does not feel particularly hot initially but becomes hotter with sustained palpation, then Heat is in the interior. Cold skin generally suggests strong Yin-Cold or deficiency of Yang-Qi. If the four limbs are cold but the chest and abdomen are hot, then strong Yang-Heat has expelled Yin to the exterior, producing a condition of true Heat and false Cold.

Well-hydrated, smooth and lustrous skin reflects ample body fluids, sufficient to ensure nourishment of the exterior. Dry and dehydrated skin reflects insufficiency of body fluids and loss of nourishment for the exterior.

Pressure on an area of swelling can differentiate between water edema and Qi inflation. Press hard enough to make a depression (but not so hard as to cause injury) and let go quickly. If the depression remains for a long while the swelling is edema. If it fills up promptly it is Qi inflation.

Pressure on a part of a swelling can differentiate between Yin and Yang, and determine whether there is much pus-formation. If the lesion feels hard to pressure, is not feverish and has a flat bottom, it is a Yin lesion. If it is feverish, tender and has a tight bottom, it is a Yang lesion. If the entire swelling is hard in general there is no pus-formation. If the edges are hard but the center is soft, there already is pus-formation.

## ***2 Palpating the Anterior Fontanelle***

This is used to examine sick infants. The normal infant's anterior fontanelle is moderately tense and pulsates. Its surface is level with the surrounding bone of the skull. In general, the anterior fontanelle begins to shrink in size when the infant is about six months of age and closes completely by about a year and a half of age.

The anterior fontanelle often shows abnormal bulging, depression or delayed closure. In general, a bulging anterior fontanelle signifies Heat strength. It is seen in epilepsy and in dangerous stages of Heat diseases. A depressed anterior fontanelle signifies an illness of deficiency. This may be due to prenatal insufficiency or malnutrition, which leads to insufficiency of brain tissue. Severe vomiting and diarrhea can also lead to a depressed anterior fontanelle; so can massive blood loss.

Delayed closure beyond a year and half of age occurs mostly in illnesses of genuine Qi deficiency, but also in rickets.

## ***3 Palpating the Neck***

The main purpose of examining the neck is to search for masses. The most important of these are scrofula and goiter.

**Scrofula**, known in Western medicine as tuberculous lymphadenitis, has the appearance of a series of swellings in the neck like a string of pearls. The swellings

form rapidly and may be of variable size, the larger ones about that of pigeon eggs. If the swellings are hard and tender to pressure they are mostly due to exogenous Wind-Heat or Phlegm-Heat collecting in the neck. Scrofula can also result when liver-Qi is unable to move freely and the spleen loses its dispersion and transportation function. This leads to retention of water and Dampness, which may transform into Phlegm over time. The Phlegm then collects in the neck. In this case the lesions of scrofula form gradually and are hard. There is no tenderness on pressure and the overlying skin remains normal. Early in their formation the swellings are movable, but with time some become matted to the surrounding tissues.

**Goiter** consists of swelling in the front of the neck on both sides, just below the main part of the larynx. It is not tender on pressure and the overlying skin remains normal. Goiter tends to enlarge progressively, and is persistent and difficult to cure.

When examining the neck for goiter, the optimal position for the patient is to sit upright with both hands placed gently on the knees, so that the neck is fully exposed. The physician sits or stands either in front facing the patient or behind, and uses both hands. Note especially the location, size and shape of the goiter. Goiter characteristically moves up and down with swallowing. If the goiter enlarges diffusely with indistinct borders, is soft to pressure and expands or shrinks with joy or rage, and has normal overlying skin, it is a **Qi-goiter**. This is mostly due to dietary deficiency of iodine, repressed passions, Qi stagnation or blood stasis. If the goiter is partial and semi-circular in shape, has a smooth surface, and is not tender on pressure, it is a **flesh-goiter**. This is due mostly to melancholic brooding or repressed rage, accumulation of gelled Dampness-Phlegm, Qi stagnation or blood stasis. If the goiter is hard as stone, has an irregular surface, is unmovable, and is tender to pressure, it is a **stone-goiter**. This is due mainly to Qi stagnation, accumulation of gelled Phlegm-Dampness and static blood. It is mostly malignant.

## 4 *Palpating the Chest and Flanks*

### i **Apex of the Heart**

This is best palpated below the left breast, between the fourth and fifth ribs, where the apex of the heart beats against the chest wall. It is connected to the large collateral of the stomach meridian, and is where thoracic Qi gathers. Thus, palpation of the heart apex can produce information on the ampleness of thoracic Qi, the strength or deficiency nature of the illness and the prognosis.

In normal conditions the pulsation of the apex is rhythmical, forceful and unhurried. If its pulsation is feeble or not palpable then thoracic Qi is deficient internally. If its pulsation is excessively forceful then thoracic Qi is leaking outward. If the beating is too fast then there is accumulated Heat in the chest and abdomen with strong evil Qi, or Yang-Qi is depleted with outward escape of weakened Yang-Qi. If the beating is too slow, the illness is one of Cold or of deficiency. If there is no

beating at all, then thoracic Qi is completely exhausted and death is either imminent or has already come.

Note that the apex of the heart may not be palpable in very obese patients who are otherwise normal.

## **ii Breast**

When examining the breast pay attention to the texture and elasticity of the tissues, and whether there are lumps or tenderness. A normal breast gives a sense of elasticity, and feels like fine, soft and irregular grains. There is no pain from moderate pressure.

A red and swollen breast with pain that is aggravated by pressure signifies a breast abscess. If the center of the swelling is soft and fluctuant, then there is already pus-formation. Breast abscesses are mostly caused by blockage of the milk ducts, depression of liver-Qi with stomach-Heat, or Qi stagnation and blood stasis.

If the breast contains one or several masses that are the size of plums, with indistinct borders and matting to surrounding tissues, and that in later stages may rupture and drain pus, it is mammary tuberculosis. Its main causes are blazing Fire in Yin deficiency with gelling of Phlegm and Fire.

If the breast has egg-shaped masses that range in size from cherries to plums or eggs, with smooth surfaces and hard body, and that are movable and well demarcated, this is due to Phlegm and static blood collecting in the breast and forming benign tumors.

If there is a mass that is very hard, has uneven surfaces, is not movable, or is poorly demarcated from surrounding tissues, this is most likely breast cancer. There may be more than one mass in breast cancer.

## **iii Palpating the Flanks**

Discomfort or pain on pressure accompanied by a dry throat, a bitter mouth and loss of appetite signifies illness in the Shaoyang Meridian (see Volume 1, Part II, Chapter 9, [Section 4](#)). If the right epigastrium is full and tender and is feverish, there is likely to be a liver abscess. If the mass in the right epigastrium has an uneven surface it signifies liver cancer. Tender masses below the armpits, whether soft or hard, are mostly due to Qi stagnation and blood stasis.

## **5 Palpating the Abdomen**

Palpating the abdomen is an important part of diagnosis. It can provide information important for differentiating between Cold and Heat and between strength and deficiency.

**Cold–Heat** A cool abdomen with preference for warmth is a symptom of Cold. A warm abdomen with preference for cold is a symptom of Heat.

**Deficiency–Strength** A full or tender abdomen, with guarding (resistance to pressure), indicates pathogenic evil strength. An empty-feeling abdomen that is soft to pressure or abdominal pain that is reduced by pressure is a symptom of deficiency. If the abdomen is distended and auscultation reveals splashing water sounds, the illness is one of water retention due to strong exogenous pathogenic evil. If the abdomen sounds like an empty drum on percussion, it is Qi distention due mostly to deficiency illnesses.

**Accumulation–Stagnation** Most abdominal masses form because of Qi stagnation or blood stasis. A painful and palpable unchanging mass with fixed location is due to blood stasis. If pain is not fixed in location and there is no palpable mass, the illness is due to Qi stagnation.

**Roundworms** The palpation of roundworms in the abdomen has three characteristic findings. One, the mass feels like a bundle of noodles. Two, on careful examination the fingers can feel the worms moving. Three, the abdominal wall is uneven, bulging in some places and sunken in others; and on pressure, the unevenness shifts.

## 6 *Palpating Shu Acupoints*

The Shu acupoints are the confluence of the Qi of all the *zang-fu* organs and the Qi and blood of all the meridians and their collateral vessels (for Shu points see Volume 2, Part I, Chapter 2, [Section 3, Subsection I](#)). Hence, some diseases of the internal organs may be inferred from information obtained by palpation at these points. The main abnormal response of these points is tenderness on pressure and hypersensitivity. Their main manifestation is palpable knots or cords. For example, in certain lung diseases, knots may be palpated in the lung Shu acupoint or tenderness on pressure in the acupoint Zhongfu (LU-1).

## Section 4 *Inquiring*

The method of inquiring includes the present illness (including the current symptoms at the time of consultation), the past history (previous illnesses and treatments), the personal lifestyle and preferences, the family history and any additional information related by the patient or others concerning the illness. This information – on the onset and progression of illnesses, the patient's symptoms, previous diagnoses and treatment if any – is the basis for diagnosis. History is therefore one of the principal methods for understanding an illness, and it has an indispensable place in diagnostics in CM.

## **I General Approach and Points of Attention**

1. It is essential that the physician is courteous and sympathetic to the patient's suffering. This is the only way to win the patient's trust, cooperation and willingness to confide. Carry out the inquiry with the utmost concentration and professional demeanor. Do not sigh or show any surprise or pessimistic attitude about the patient's condition. It is especially important to maintain a cool head if the patient is in critical condition or has a mental illness. Such a professional demeanor helps to reassure the patient.
2. The physician should focus initial attention on the patient's chief complaint and make a deliberate inquiry about it. The inquiry should be comprehensive, with emphasis on significant facts. As the story unfolds encourage the patient where necessary to fill in the gaps. However, it is important to avoid pointed prompting or inducing the patient to say what you may wish to hear, as that may lead down a wrong path and create an inconsistency between the history and the findings by the other methods of diagnosis.
3. A patient in critical condition should be given immediate treatment after only a brief inquiry and examination; this helps to avoid any unnecessary delay in urgent treatment. A comprehensive and careful history and examination may be conducted when the patient's condition takes a favorable turn or stabilizes.
4. In the inquiring process simple language instead of medical terminology should be used. Be sure to catch the exact meaning of the patient's dialect and slang, and ask for clarification where there is any vagueness or ambiguity.
5. If necessary, obtain the history, or supplement it, from the patient's companion or parent.

## **II Contents of Inquiring**

### ***1 General Data***

These include the patient's name, sex, age, matrimonial status, ethnicity, occupation, hometown and address. All these are helpful for the physician to take responsibility for the patient, to write the case history and to make the correct diagnosis.

### ***2 Chief Complaint***

The chief complaint refers to those symptoms that cause the patient the most distress. These symptoms and their course should be recorded separately from other symptoms. The chief complaint is the main reason for the patient to seek medical advice, and serves as a guide to the correct diagnosis.

Record the chief complaints in accurate and concise language, without medical jargon.

### **3 *Present Illness***

The present illness includes its onset and development. It may include diagnoses and treatments, if any, given prior to the current consultation. Accurate grasp of the present illness is indispensable for analyzing the patient and his illness and for establishing the correct diagnosis. The main components of the present illness are described here.

#### **i Onset of Illness**

This means the timing of the first symptom, possible cause, and exposure to inducing factors as well as the mode of onset (i.e., sudden or gradual). Understanding these factors will help assess whether the illness is one of deficiency or strength, or Cold or Heat.

For example, an illness that begins suddenly and lasts a short time is likely to be one of evil Qi strength, whereas one that begins slowly and lasts a long time is likely to be one of deficiency. A Cold illness usually follows exposure to exogenous Cold, and a Heat illness usually follows exposure to exogenous Heat.

#### **ii Characteristics of Main Symptoms**

These include their location, nature and duration. An understanding of these characteristics helps in the determination of the location and nature of the illness.

For example, dull epigastric pain that is relieved by warmth and pressure suggests deficiency of spleen-Yang. Lumbar and knee aches and weakness, cold-intolerance, and cold extremities suggest deficiency of kidney-Yang.

#### **iii Concomitant Symptoms**

The characteristics of the other symptoms besides the main symptoms contribute to the differentiation of strength and deficiency, and Cold and Heat nature of the illness.

For example, suppose the main symptom is insomnia. If the patient concomitantly has palpitation of the heart, irritability, a red tongue with little coating and a threadlike and rapid pulse, the illness may be due to deficiency of heart-Yin. If instead the patient concomitantly is easily frightened, has a bitter taste in the mouth, a yellowish and greasy tongue coating and a slippery and rapid pulse, the illness may be due to accumulation of Phlegm in the gallbladder.

#### **iv Course of Illness**

Knowledge of the course of the illness from its onset to its present state is essential to its correct diagnosis. It is necessary to ascertain whether the symptoms have worsened, lessened or stayed the same, and whether the illness has taken an unfavorable or a favorable turn. It is also important to know if the symptoms are intermittent, spasmodic or steady, whether they have changed or remained the same; and if changed when and why they changed.

#### **v Previous Diagnosis and Treatment**

It is important to know whether the patient has consulted another physician, what kind of examinations he has undergone, how the diagnosis has been made and what medicine he has taken and whether the medicine has been effective or not.

### ***4 Past History***

The patient's status prior to the development of the present illness is clearly the result of many factors. Among the most important of these factors are his previous illnesses and his general health.

For example, a patient who has always been in excellent health is more likely to develop an illness of strength. One who has been in ill health is more likely to develop an illness of deficiency, but is also more susceptible to exogenous illnesses.

### ***5 Personal Lifestyle and Preferences***

The areas of interest here are the patient's lifestyle, diet, hobbies, patterns of work and rest, general state of mind, and addictions if any. These all have the potential to affect his resistance or susceptibility to illness. In the matter of diet, an unbalanced preference for certain tastes may contribute to the vigor or weakness of some visceral organs. Improper work and rest patterns or habitat may also contribute to the development of illness.

### ***6 Family History***

This is especially important where a contagious or hereditary illness may be involved. In addition to blood-relatives, the family history should include all members

living in the same household. In some cases, it is even necessary to know about persons in the immediate neighborhood.

### **III Clinical Significance of Some Common Symptoms**

#### **1 Chills and Fever**

The production of chills and fever is related principally to the abundance or depletion of the organs' Yin–Yang. Illnesses resulting from exposure to the Cold evil generally manifest coldness symptoms, whereas those resulting from exposure to the Heat evil generally manifest hotness symptoms. Yin abundance or Yang deficiency mostly shows coldness symptoms, whereas Yang abundance or Yin deficiency mostly shows hotness symptoms. Hence, asking about chills and fever helps to understand the nature of the pathogenic evil and to ascertain the ampleness of the body's Yin–Yang.

Clinically, chills and fever can manifest the following patterns.

##### **i Cold-Aversion and Cold-Intolerance**

Cold-aversion means the patient dislikes cold and feels better when warmed. This occurs mainly in various conditions of internal injury. Because Yang-Qi is deficient it is unable to warm the exterior. Cold-intolerance means the patient dislikes cold and does not feel better even when warmed. This occurs mainly in exogenous illnesses of the exterior. Because evil Qi has attacked the exterior and defensive Yang is obstructed, the exterior loses its warmth.

Simultaneous fever and cold-intolerance occurs mainly in exogenous illnesses, especially in the early stages. If there is more intolerance of cold than fever and the pulse is floating and tight, it is a cold illness in the exterior. If there is more fever than intolerance of cold and the pulse is floating and rapid, it is a Heat illness of the exterior. If the cold-intolerance and fever are accompanied by sweating and a floating and even pulse, it is a deficiency illness of the exterior. If the cold-intolerance and fever are accompanied by aches in the body and head but not sweating and the pulse is floating and tight, it is a strength illness of the exterior.

##### **ii Fever and Feverishness**

Fever means a body temperature higher than normal. Feverishness means feeling hot despite a normal body temperature. Fever and cold-intolerance occurring in the same illness are mostly due to exogenous pathogenic evil in the exterior. Fever without cold-intolerance is mostly due to interior Heat. The most common patterns are the following.

**High Fever** The body temperature is greater than 39°C (102.2°F), is persistent and is not accompanied by cold-aversion. This occurs in illnesses of Heat strength, and results mostly from exogenous Heat or exogenous Cold entering the interior and transforming into Heat. In the latter case, strong Heat in the interior has diffused to the exterior.

**Recurrent Fever** In this condition the fever or feverishness recurs regularly like the tide; hence this is also known as tidal fever. There are three such patterns clinically.

*Recurrent Yangming Fever* The fever is typically quite high, especially between 3 and 5 o'clock in the afternoon. Also typically, abdominal distention and constipation accompany the fever. It is the result of the Heat evil mixing with the chyme and retained food in the stomach and intestines (for Yangming see Volume 1, Part II, Chapter 9, [Section 4](#)).

*Recurrent Fever of Dampness-Heat* In this pattern the skin does not feel hot when first touched, but becomes hotter with prolonged palpation. The fever tends to be mild in the morning or night but rises in the afternoon, and is accompanied by chest tightness, heaviness in the head and body and a greasy tongue coating. It is the result of Dampness and Heat accumulating in the interior and the trapped Yang-Qi not being able to reach the exterior.

*Recurrent Fever of Yin Deficiency* This is typically a low-grade fever in the afternoon and at night. Along with the fever there are flushing of the cheeks, night sweats and hotness in the five centers. This is due to internal Heat arising out of Yin deficiency. During the afternoon and at night defensive Yang returns to the interior, causing the interior temperature to rise.

**Low-Grade Fever** Here the temperature is typically between 37°C and 38°C (98.6°F and 100.2°F). It is often seen in illnesses due to deficiency of Yin, blood or Qi, as well as in the late stages of Heat diseases.

**Dysphoria with Feverish Sensation in Chest, Palms and Soles** This is feverishness in the chest, the two palms and the two soles, with dysphoria. The body temperature may or may not be raised. It is mainly seen in illnesses of interior heat due to Yin deficiency, but also when exogenous Heat evil has entered the Yin Level of the warm diseases (Nutritive or Blood Level).

### iii Alternating Chills and Fever

Alternating chills and fever reflect the struggle between evil Qi and genuine Qi, and is due to evil Qi accumulating in the area between the exterior and the interior. Clinically, it has two main patterns. In one the alternation is regular; this is typical of malaria. In the other the alternation is unpredictable; this is seen mainly in an illness in the Shaoyang Meridian (see Volume 1, Part II, Chapter 9, [Section 4](#)).

## 2 *Pain*

When inquiring about pain pay attention to the quality and location of the pain.

### i *Quality of Pain*

**Distending Pain** Distending pain in the chest, abdomen or flanks suggests stagnation of Qi. Distending pain in the head or eyes suggests flaming upward of liver-Fire or abnormal ascent of liver-Yang.

**Stabbing Pain** This is a sign of blood stasis.

**Cold Pain** This is pain associated with the sensation of coldness and alleviated by warming. It is mostly due to the Cold evil in the meridians or deficiency of Yang-Qi causing loss of warmth.

**Burning Pain** This is pain associated with feverishness and alleviated by cooling. It is mostly due to strong Yang-Heat or endogenous Heat due to Yin deficiency.

**Colicky Pain** This is spasmodic pain, and is mostly due to strong disease evils blocking the meridians. It is a sign that the illness is one of strength.

**Dull Pain** The pain is less intense but persistent. It is mostly due to deficiency of Yin-blood or insufficiency of Yang-Qi, so that the visceral organs lose their nourishment. It is a sign that the illness is one of deficiency.

**Heavy Pain** This is pain accompanied by a sensation of heaviness. It is mainly due to Dampness blocking the meridians so that Qi cannot move freely.

**Aching Pain** Here the pain is more of the quality of aches, with associated weakness. Total body aching pain is seen in illnesses in the exterior or of Dampness. Lumbar and knee aches are mostly due to kidney insufficiency.

**Hollow Pain** This is pain associated with a sensation of emptiness. It is mainly due to deficiency of Qi and blood, so that essence and marrow become deficient and the organ systems lose their nourishment.

### ii *Location of Pain*

**Migratory Pain** Migratory pain in the joints suggests rheumatism. Migratory pain in the chest, flanks and abdomen suggests Qi blockage.

**Fixed Pain** This is pain that is fixed in location. If it is in the joints of the limbs it is Cold palsy. If it is in the interior it suggests blood stasis.

**Headache** The precise location of the headache can indicate the meridian involved in the illness. Frontal pain across the superciliary ridges is in Yangming. Temporal pain on both sides is in Shaoyang. Occipital pain is in Taiyang. Pain in the vertex of the head is in Jueyin (see Volume 1, Part II, Chapter 9, [Section 4](#)).

Depending on the quality of the pain and its accompanying symptoms it is possible to differentiate between exogenous illness and internal injury, between deficiency and strength, and between Cold and Heat.

Severe and persistent headache accompanied by total body aches, cold-intolerance and fever is mostly due to exogenous illness. Strong pain in the vertex that is aggravated by wind or cold is due to Wind-Cold. In a patient preferring cold things headache that is aggravated by wind or heat is due to Wind-Heat. Headache that feels as though the head is being tightly bound and being weighed down, with heaviness in the limbs and body, is due to Wind-Dampness.

Milder but persistent headache, with frequent remission, is mostly due to internal illness. Dull headache associated with over-fatigue is due to Qi deficiency, but dull headache associated with dizziness and facial pallor is due to blood insufficiency. Hollow headache, as though the skull is empty, associated with lumbar and knee aches and weakness is due to insufficiency of the kidney. Headache with associated heaviness in the head, abdominal distention and loose feces is due to spleen insufficiency. Stabbing headache in fixed location is due to blood stasis. Headache as though the head is being tightly bound and accompanied by chest tightness and greasy tongue coating is due to turbid Phlegm, but if accompanied by bitter taste and dry throat it is due to flaming upward of liver-Fire.

**Chest Pain** Chest pain is mostly seen in diseases of the heart or the lung. Chest pain with inability to breathe and referral of pain to the shoulder or back is due to chest-Yang being suppressed, internal blockage by turbid Phlegm, or blood stasis in Qi deficiency. Any of these can then lead to impeded flow of Qi and blood in the heart meridian. Chest pain accompanied by fever and labored breathing is due to strength Heat in the lung. Chest pain accompanied by night sweats and hemoptysis is due to deficiency of lung-Yin.

**Flank Pain** Flank pain is common in illnesses of the liver or the gallbladder. Flank pressure and pain accompanied by sighing and irascibility is mostly due to trapping of lung-Qi or suppression of the passions. Flank pressure and pain accompanied by yellowing of the skin and sclera is mostly due to jaundice, which results from the gelling of the mixture of liver-Yin and Dampness-Heat. Stabbing flank pain that is migratory is mostly due to stasis of liver-blood and blockage of meridians. Burning flank pain accompanied by a flushed face and inflamed eyes is mostly due to trapping of liver-Fire which then burns the meridians in the flanks and ribs. Burning flank pain accompanied by recurrent fever and night sweats is mostly due to deficiency of liver-Yin.

**Abdominal Pain** Unrelenting abdominal pain that is alleviated by pressure is due to an illness of deficiency. Severe and constant abdominal pain that is aggravated by pressure is due to an illness of strength. Abdominal pain that feels as though cold and that is alleviated by warming is due to a Cold disease. Abdominal pain that feels as though warm and associated with preference for cold is due to a Heat illness. Abdominal pain associated with a mass under the umbilicus that is movable signifies a collection of intestinal parasites. Distention and pain in the lower abdomen accompanied by loss of urination is due to blockage of the bladder outlet.

**Lumbar Pain** Aching lumbar pain associated with generalized weakness is due to kidney insufficiency. Cold pain and heaviness in the waist worsening on rainy days is due to Dampness. Lumbar pain that is like pinpricks, fixed in location and showing guarding, and prevents turning or lying flat, prone or supine, is due to blood stasis.

**Limb Pain** Pain in the limb joints is mostly due to rheumatism and is mostly caused by exogenous Wind-Cold-Dampness. If the joint pain is migratory it is migratory rheumatism and is principally due to exogenous Wind. If the joint pain is severe it is painful rheumatism and is principally due to exogenous Cold. If the painful joint is heavy and immobile it is severe rheumatism and is principally due to exogenous Dampness. If the painful joint is red and swollen it is Heat rheumatism and is principally due to accumulated Dampness in the interior transforming into Heat.

**Total Body Pain** Total body aching accompanied by fever, cold-aversion, absence of sweating and a floating and tight pulse is due to Wind-Cold binding the exterior so that the meridians there are blocked. Total body aches accompanied by heavy limbs and pressure headache as though squeezed is mostly due to Dampness attacking the superficies. Total body pain from prolonged lying in bed because of chronic illness is mostly due to disharmony between Qi and blood so that the meridians are blocked.

### **3 Perspiration**

Abnormalities of perspiration can help differentiate syndromes of interior–exterior, Cold–Heat, and deficiency–strength. The key aspects are the following. Is the patient sweating? When does the patient sweat? In which area is the patient sweating? How much is the patient sweating?

#### **i Absence of Sweat**

Sweating may be absent in exogenous illnesses, internal injuries, and early stages of certain chronic illnesses.

In exterior illnesses, absence of sweat accompanied by cold-intolerance, mild fever and a floating and tight pulse indicates Cold in the exterior. The reason is that the exogenous Cold evil suppresses defensive Yang and blocks the sweat pores.

In internal injuries, absence of sweating accompanied by dehydration of the skin with withering of the hair is mostly due to deficiency of Yin-blood (sweat losing its source) or deficiency of Yang-Qi (loss of evaporative function).

#### **ii Sweating in Exterior Illnesses**

If the sweating is associated with fever, wind-aversion and a floating and even pulse, it indicates deficiency in the exterior caused by exogenous Wind opening the sweat

pores. If the sweating is associated with high fever, mild cold-aversion, sore throat and a floating and rapid pulse it indicates Heat in the exterior caused by internal Heat diffusing into the exterior.

### iii Sweating in Interior Illnesses

There are four major patterns of sweating in interior illnesses.

**Spontaneous Sweating** This is sweating in the daytime, even without physical activity but more so with exertion. It is often accompanied by cold-aversion, weariness, shortness of breath and unwillingness to speak. It is due to deficiency of Qi or Yang. When Yang-Qi is deficient the superficies is unprotected and the sweat pores cannot be closed.

**Night Sweats** This is sweating during sleep that stops on waking, and often accompanied by recurrent fever, flushed cheeks and hotness feeling in the “five centers”. It is due to Yin deficiency, because of which internal Heat arises. After falling asleep Yang-Qi returns to the interior and aggravates the internal Heat, which in turn causes fluids to evaporate outward.

**Profuse Sweating** Clinically this may be due to strength or deficiency. Incessant sweating with fever, thirst, preference for cold drinks, and a large surging pulse is due to Heat strength. The strong internal Heat causes evaporation and outward escape of fluids. If the profuse sweat is cold and is accompanied by facial pallor, cold limbs and an indistinct pulse that is on the verge of collapsing, it is due to total Yang depletion. This is seen mainly in critically ill patients.

**Shivering Sweating** In sweating with shivering the patient has chills and shivering followed by profuse sweating. The face shows expressions of misery. If the fever subsides with the sweating, the pulse becomes calm and the body becomes cool, it is a favorable sign that the pathogenic evil has been expelled. If sweating occurs but the patient still has restlessness and dysphoria and the pulse is swift and hurried, it is a danger sign that evil Qi has overcome genuine Qi.

## 4 Diet

The amount of food and drink intake has direct effect on the functions of the spleen and the stomach. Thus, information about the diet can provide clues to the functional state of these organs. Clinically, there are six main patterns.

**Absence of Thirst** This indicates that the body fluids have not been damaged. It is often seen in illnesses of Cold or Dampness. It is also seen in other illnesses in which there is no clear evidence of Heat in the body.

**Thirst with Polydipsia** This indicates that the body fluids have been severely damaged. Extreme thirst with desire for cold drinks and accompanied by fever, profuse

sweating and a large surging pulse is due to Heat strength. It is a self-preserving response to strong Heat severely damaging fluids in the interior. Extreme thirst with polydipsia, polyuria, polyphagia but emaciation is due to diabetes. This is caused by lung-Heat damaging fluids, strong stomach-Heat, or marked deficiency of kidney-Yin.

**Thirst without Polydipsia** This indicates mild damage to the fluids, or fluids not yet damaged but the distribution of fluids is impaired, so that the mouth and throat are not moistened. If internal fever (cool skin), chest tightness and a greasy tongue coating accompany the thirst then it is mostly due to Dampness-Heat. If agitation, delirium, fever that is worse at night and a crimson tongue accompany the thirst then it indicates an epidemic warm illness in which Heat has entered the Nutritive and Blood Levels (see Volume 1, Part II, Chapter 9, Section 5). If there is vomiting immediately upon drinking, accompanied by dizziness and blurred vision, it is mostly due to accumulation of Phlegm–Rheum. Thirst with a desire to rinse the mouth but not to drink and accompanied by purpuric spots on the tongue is mostly due to internal blood stasis.

**Anorexia** Anorexia accompanied by emaciation, weakness, abdominal distention, loose feces, a pale tongue and a depletive pulse is due to deficiency of spleen and stomach Qi. Anorexia with blocked stomach, heaviness of the body and a white and greasy tongue coating is due to Dampness binding the spleen. Anorexia with aversion to greasy foods and accompanied by jaundice, epigastric distress and a yellow and greasy tongue coating is due to Dampness-Heat in the liver and the gallbladder. Anorexia with fetid eructation, abdominal distention and pain and a thick and curdled tongue coating is due to food retention.

**Polyphagia with Ready Hunger** Polyphagia with ready hunger but emaciation and loose or watery diarrhea indicates that the stomach is strong but the spleen is weak. If there is thirst and polydipsia as well as polyphagia and emaciation it may be diabetes.

**Hunger Without Appetite** If this is accompanied by a burning sensation in the stomach and a red tongue with scant coating it is mostly due to deficiency of stomach-Yin, which allows Fire to arise and disturb the interior. If hunger without appetite is accompanied by dizziness, tinnitus, insomnia, forgetfulness, it is mostly due to deficiency of kidney-Yin, which allows Fire to arise and disturb the stomach.

## 5 *Defecation*

### i **Constipation**

Constipation is a difficult defecation, or defecation at prolonged intervals, sometimes several days. Clinically, there are four major types.

**Heat Constipation** This type of constipation is accompanied by scant red urine, flushing of the face, agitation, abdominal distention or pain, a red tongue with yellow coating and a slippery and rapid pulse. It is due to accumulation of Heat in the intestines and the stomach, which damages the fluids and causes the large intestine to become dry.

**Cold Constipation** In addition to constipation the patient also presents increased clear urine, cold hands and feet, cold-aversion with preference for warmth, cold pain in the abdomen, and a deep and slow pulse. It is due to excessive interior Yin-Cold blocking the actions of intestine-Qi.

**Qi Constipation** In addition to constipation the patient also presents increased eructation and flatulence, abdominal distention, borborygmus, flank pain, and a taut pulse. It is due to impaired Qi action so that the large intestine loses its transportation function and allows residues to accumulate.

**Deficiency Constipation** This type of constipation is due to deficiency of Qi, blood or Yin. Constipation due to Qi deficiency is accompanied by shortness of breath, weariness with fatigue, a pale tongue and a depletive pulse. Constipation due to blood deficiency is accompanied by palpitation of the heart, forgetfulness, dizziness, blurred vision, a pale tongue and a threadlike pulse. Constipation due to Yin deficiency is accompanied by emaciation, flushing of the cheeks, dizziness, tinnitus, a red tongue with scant coating and a rapid threadlike pulse.

## ii Diarrhea

Diarrhea means increased frequency of defecation with thin or loose feces or feces containing undigested food matter. In some cases, the feces may resemble water. The principal cause is impairment of the distribution function of the spleen, so that water is retained in the intestines, and of the transportation function of the large intestine. The following are the main clinical patterns.

**Cold-Dampness Diarrhea** In this pattern the feces are thin and clear, sometimes even like water. There are abdominal pain with borborygmus and a white and greasy tongue coating. It is due to Cold and Dampness attacking the spleen and the stomach, and the impairment of their functions leads to mixing of the clear and the turbid, so that undigested food and drink are transmitted to the large intestine.

**Dampness-Heat Diarrhea** In this pattern the feces is yellow-brown in color. There are abdominal pain, burning in the anus, dark yellow urine and a yellow and greasy tongue coating. It is due to Dampness and Heat accumulating in the large intestine, causing it to lose its transportation function.

**Dietary Diarrhea** In this pattern the feces smells of rotten egg. There are abdominal pain, alleviated by defecation, foul eructation, acid regurgitation and a slippery pulse. It is due to binge eating and drinking or eating unclean foods, so that the spleen and the stomach are damaged and lose their transformation and transportation

functions. As a result the essential Qi of drinks and foods cannot be absorbed and the transmission function of the large intestine is lost.

**Spleen Deficiency Diarrhea** In this pattern the feces is first dry then watery. There are progressive loss of appetite, abdominal pressure and distention upon eating, fatigue and weariness, a pale tongue and a feeble pulse. It is due to deficiency of spleen-Qi, with weakening of the motive force for transformation and transportation and resultant retention of water and Dampness.

**Kidney Deficiency Diarrhea** In this pattern there is predawn abdominal pain around the umbilicus, accompanied by borborygmus. This is followed promptly by diarrhea, which relieves the pain and borborygmus. In addition, there are cold-aversion, cold limbs, lumbar and knee aches and weakness. It is due to deficiency of kidney-Yang, so that it can no longer warm spleen-Earth (see Volume 1, Part I, Chapter 1, [Section 2](#), Subsection III). As a result, the spleen becomes cold and loses its transformation and transportation functions, and Yin-Cold-Dampness accumulate in the interior.

## 6 *Urination and Urine*

Information about abnormalities of urination provides clues to the ampleness of fluids and the functional status of the lung, spleen and kidney Qi. The main types of abnormalities of urination or urine are as follows.

**Oliguria** In oliguria the urine output is diminished, and the urine is dark yellow, reddish yellow or yellowish brown. It indicates Heat.

If accompanied by restlessness and insomnia it is due to blazing Heart-Fire. If accompanied by flank pain and jaundice it is due to Dampness-Heat in the liver and the gallbladder. If accompanied by abdominal distention and constipation it is due to the evil strength in the stomach and the intestines. If accompanied by urinary urgency, frequent urination and dysuria it is due to Dampness-Heat in the bladder.

In addition, in hot weather, with increased sweating and inadequate drinking, there may also be oliguria. This is easily reversed by increased drinking and is not an illness.

**Clear Polyuria** In polyuria the urine output is increased. Clear polyuria indicates Cold. If accompanied by a pale complexion, lumbar and knee aches and weakness, a pale tongue and a depletive pulse it is due to insufficiency of kidney-Yang. If accompanied by cold pain in the abdomen, a pale tongue and a deep and taut pulse it is due to excessive Yin-Cold in the interior.

**Cloudy Urine** Cloudy yellow urine accompanied by urinary urgency and frequent urination indicates Dampness-Heat in the bladder. If accompanied by lumbar and knee aches and weakness it is due to kidney insufficiency. If accompanied by a poor appetite as well as lumbar and knee aches and weakness it is due to insufficiency of both the spleen and the kidney.

**Frequent Urination** If frequent urination also produces increased amounts, and is accompanied by polydipsia and polyphagia it may be due to diabetes. If frequent urination is accompanied by urinary urgency, dysuria and dark yellow urine it is due to Dampness and Heat in the bladder. If the frequent urination occurs at night and the urine is clear it is due to insufficiency of kidney-Yang.

**Urinary Incontinence** This is mostly due to failure of kidney-Qi to consolidate and control the bladder. In severely ill patients who are not fully conscious urinary incontinence may also occur.

**Difficulty with Urination** Difficulty with urination accompanied by puffiness of the eyelids and face is due to failure of lung-Qi to disperse. If accompanied by anorexia and weariness it is due to inability of spleen-Yang to act. If accompanied by cold-aversion and lumbar aches it is due to insufficiency of kidney-Yang. If accompanied by yellow urine and a rapid pulse it is due to Dampness-Heat in the bladder.

**Painful Urination** If the pain is burning in quality it is due to Dampness-Heat. If it is sharp and stabbing it is due to blood stasis. If it is colicky it is due to urinary stones.

**Enuresis** This is mostly due to failure of kidney-Qi to consolidate and control the bladder. In children younger than 3 years of age it may be regarded as physiologic enuresis (normal).

## 7 *Sleep*

There are three main types of sleep disturbance.

**Insomnia** This may present as difficulty falling asleep, easy waking from sleep or inability to sleep at all through the night. It is often accompanied by excessive dreaming. Insomnia occurs in many illnesses.

If insomnia is accompanied by palpitation of the heart, restlessness and a red tongue with little coating it is due to insufficiency of heart-Yin. Difficulty falling asleep accompanied by palpitation of the heart and lumbar and knee aches and weakness is due to disharmony between the heart and the kidney. Easy waking from sleep accompanied by palpitation of the heart, reduced appetite, a pale tongue and a feeble pulse is due to insufficiency of both the heart and the spleen. Insomnia accompanied by much sputum and a yellow and greasy tongue coating is due to Phlegm-Heat disturbing the heart. Awakening with fright from sleep, accompanied by dizziness, chest tightness, timidity, restlessness, vomiting and nausea and a bitter taste in the mouth, is due to accumulation of Phlegm in the gallbladder.

**Excessive Dreaming** The causes and significance of excessive dreaming are generally similar to those for insomnia, and their treatment is also similar.

**Somnolence** Somnolence accompanied by fatigue, dizziness, blurred vision, heaviness in the limbs, chest tightness and a greasy tongue is due to Phlegm-Dampness

invading the spleen and preventing pure Yang from ascending. If accompanied by extreme fatigue, cold-aversion, cold limbs and an indistinct and threadlike pulse it is due to insufficiency of heart and kidney Yang. Postprandial somnolence associated with a weak constitution, anorexia, shortness of breath and weakness is due to deficiency of spleen-Qi, so that pure Yang does not ascend and fails to nourish the head.

## **8 *Common Symptoms in Internal Medicine***

### **i Vertigo**

Vertigo accompanied by distending headache, tinnitus, flushed face, inflamed eyes and a taut and rapid pulse is due to blazing liver-Fire. If the patient is in a daze as well and the vertigo is further accompanied by chest tightness, severe nausea and a greasy tongue coating it is due to Phlegm-Dampness trapped in the interior, preventing the ascent of pure Yang. If vertigo is accompanied by weariness, a pallid complexion, a pale tongue and a depletive pulse it is due to deficiency of both Qi and blood. If accompanied by lumbar and knee aches and weakness, spermatorrhea and forgetfulness it is due to deficiency of liver and kidney Yin. If accompanied by dry and irritated eyes and the sensation that the head is heavier than the legs it is due to abnormal ascent of liver-Yang.

### **ii Head Distention**

This is a sensation that the head is being distended. If the distending sensation is associated with pain and accompanied by a bitter taste, a yellow tongue coating, agitation and irascibility and a taut and rapid pulse it is due to flaming upward of liver-Fire. If it is associated with a sensation of heaviness and accompanied by chest tightness and a greasy tongue it is due to Dampness blocking the interior.

### **iii Palpitation of the Heart**

This is commonly seen in conditions that affect the heart, especially deficiency of heart-Qi, deficiency of heart-Yang, deficiency of heart-blood and deficiency of heart-Yin. It is also seen when heart-Fire blazes or when Phlegm blocks the heart openings.

In clinical practice, identification of the specific cause of heart palpitation is made on the basis of the accompanying symptoms. If accompanied by weariness and spontaneous sweating it is due to deficiency of heart-Qi. If accompanied by cold-aversion and cold limbs it is due to deficiency of heart-Yang. If accompanied by dizziness, a pale complexion and a pale tongue it is due to deficiency of heart-blood. If accompanied by recurrent fever, night sweat, a red tongue with little coating and a

threadlike and rapid pulse it is due to deficiency of heart-Yin. If accompanied by restlessness, sores in the mouth, a red tongue with yellow coating it is due to upward flaming of heart-Fire. If accompanied by mental confusion, chest tightness and a greasy tongue coating it is due to Phlegm blocking the heart openings.

#### **iv Restlessness**

Restlessness accompanied by sores on the tongue and in the mouth and a red tongue with yellow coating is due to strong heart-Fire. Restlessness accompanied by recurrent fever, night sweat and a red tongue with little coating is due to deficiency of heart-Yin.

#### **v Chest Tightness**

This is discomfort from a sensation of blockage or distention inside the chest. If accompanied by coughing productive of sputum it is due to impedance of lung-Qi. If accompanied by palpitation of the heart and chest pain it is due to blockage by stasis of heart-blood. If accompanied by distention of the flank and frequent sighs it is due to blockage of liver-Qi.

#### **vi Cough**

Cough is the main symptom of lung illnesses, and is mostly due to failure of lung-Qi to move freely. Clinically there are two categories: that due to exogenous illness and that due to internal injury. Cough accompanied by cold-intolerance, fever and a floating pulse is due to an exogenous illness, such as Wind-Cold binding the lung, Wind-Heat attacking the lung or Dampness damaging the lung. Chronic cough without other symptoms of exogenous illnesses is due to internal injury, such as deficiency of lung-Qi, deficiency of lung-Yin or Phlegm-Dampness blocking the lung.

#### **vii (Right) Flank Distention**

This occurs mainly in liver or gallbladder diseases. If accompanied by agitation and irascibility, ready sighing and a taut pulse it is due to trapping of liver-Qi. If accompanied by jaundice, a red tongue with yellow and greasy coating and a taut and slippery pulse it is due to Dampness-Heat in the liver and gallbladder.

#### **viii Abdominal Distention**

If the distention comes and goes and is eased by pressure it is due to insufficiency of the spleen and the stomach. If the distention is not reduced by pressure

and is accompanied by a white and greasy tongue coating it is due to strong Cold-Dampness in the interior. If the distention is worsened by pressure and is accompanied by foul eructation and acid regurgitation it is due to food retention in the stomach.

### ix Borborygmus

This may be seen in deficiency of spleen and stomach Qi, deficiency of spleen-Yang, deficiency of kidney-Yang, strong Cold-Dampness in the interior, and disharmony between the liver and the spleen. The mechanism is unbalanced action of Qi causing dysfunction of the large intestine.

### x Edema

In diagnosing the cause of edema first distinguish between Yin edema and Yang edema.

**Yang Edema** This is edema due to strength illnesses caused by exogenous pathogenic evils. The mechanism is retention of water or Dampness due to the lung losing its dispersion and depuration functions. The clinical characteristics of Yang edema are as follows: the edema starts in the face, then extends to the entire body surface but worse in the upper body; the skin is glossy; and urination is difficult. The edema is often accompanied by symptoms of the exterior: cold-intolerance, fever and a floating pulse. The edema of acute glomerulonephritis (inflammation of the glomeruli of the kidney) is a type of Yang edema.

**Yin Edema** This is edema due to illnesses of deficiency. The usual mechanism is deficiency of the Yang-Qi of the spleen and kidney, so that these organs are unable to transport, transform and control fluids but allow fluids to overflow into the superficies. The clinical characteristics of Yin edema are as follows: edema more pronounced below the waist; pressure-induced depression in an area of edema persisting after removal of pressure (pitting edema); distention in the epigastrium and abdomen; and anorexia and loose feces. Alternately, there may be lumbar and knee aches and weakness, cold-aversion and cold limbs, a plump and pale tongue and a deep, slow and weak pulse. The edema of chronic glomerulonephritis, chronic kidney insufficiency or heart failure is often of this type.

### xi Hematemesis

Abrupt vomiting of bright red blood accompanied by fever, thirst, gastric pain, a red tongue with thick yellow coating and a slippery and rapid pulse is mostly due to burning Heat in the stomach injuring the stomach meridian.

Vomiting of bright red blood accompanied by chest tightness, distention and pain in the flank and abdomen, agitation and irascibility and a taut and rapid pulse is mostly due to unregulated passions or liver-Fire attacking the stomach.

Vomiting of light red blood accompanied by dull gastric pain that is alleviated by pressure, palpitation of the heart, anorexia with loose feces, a pale complexion and a threadlike and feeble pulse is due to insufficiency of both the heart and the spleen. The mechanism is erratic movement of blood due to the inability of deficient Qi to control blood movement.

Vomiting of dark purple blood with clots accompanied by sharp gastric pain worsened by pressure and purpuric spots on the tongue is due to blood stasis. The mechanism is blood extravasating and flowing through abnormal pathways because of blockage of the normal pathways by static blood.

Hematemesis is the principal clinical symptom of bleeding in the upper digestive tract. It may also be seen in peptic ulcers, chronic enteritis, stomach cancer and cirrhosis of the liver.

## **xii Hematochezia**

This is bleeding from the anus or the defecation of blood, alone or mixed with feces. Hematochezia accompanied by thirst and preference for cold drinks, halitosis and bitter taste, constipation, burning sensation in the anus, a red tongue with yellow coating and a rapid and forceful pulse is due to exogenous Heat in the stomach and intestines damaging the blood vessels.

Sometimes there are first blood then feces; the blood is fresh but the defecation is difficult. If this is accompanied by a red tongue with a yellow greasy coating and a slippery and rapid pulse, it is due to Dampness and Heat together baking blood and damaging the large intestine meridians.

Sometimes there are first feces then blood, or there is blood alone, and the blood is dark purple or the feces resemble tar. If this is accompanied by a lusterless complexion, cold body and limbs, a pale tongue and a threadlike and feeble pulse, it is due to deficiency Cold of the spleen and the stomach and failure of Qi to control blood.

If the blood is fresh and bright red and the anus severely painful, it is hemorrhoids.

Hematochezia is the principal symptom of bleeding in the lower digestive tract. It may be seen in all types of enteritis, intestinal cancer, intestinal tuberculosis, certain nutritional deficiencies and various illnesses of the anus.

## **xiii Hematuria**

In the blazing of heart-Fire the blood in the urine is fresh red, the urethra is painful as though scalded or abraded, the heart palpitates and the mind is restless. Dampness-Heat in the bladder produces hematuria accompanied by frequency, urgency and pain on urination. Insufficiency of both the spleen and the kidney leads to light red hematuria that is recurrent without resolution and that is accompanied by anorexia, abdominal distention and lumbar and knee aches and weakness.

Hematuria may also be seen in tuberculosis of the urinary tract as well as stones, tumors or injury anywhere in the urinary tract. A variety of blood disorders also can cause hematuria.

#### **xiv Impotence**

Impotence accompanied by spermatorrhea, lumbar and knee aches and weakness, cold-aversion and cold limbs, and a deep and threadlike pulse is due to deficiency of kidney-Yang. Impotence accompanied by scrotal maceration, itch or pain, decreased and red urine, a yellow and greasy tongue coating and a slippery and rapid pulse is due to Dampness-Heat descending into the genitals. Impotence accompanied by agitation, irascibility, emotional depression and a taut pulse is due to gelling of liver-Qi. Impotence accompanied by palpitation of the heart, shortness of breath, spontaneous sweating, fatigue and reduced appetite is due to insufficiency of both the heart and the spleen.

#### **xv Spermatorrhea**

Spermatorrhea is the spontaneous emission of semen without sexual excitation. Spermatorrhea accompanied by palpitation of the heart, restlessness, a red tongue and a rapid pulse is due to blazing heart-Fire. Spermatorrhea accompanied by erection without sexual stimulation, yellow urine and a taut pulse is due to passion-induced Fire. Spermatorrhea accompanied by palpitation of the heart, insomnia, and lumbar and knee aches and weakness is mostly due to disharmony between the heart and the kidney. Spermatorrhea accompanied by cold-aversion, cold limbs, lying in the fetal position, a pale tongue and a deep and feeble pulse is mostly due to deficiency and decline of kidney-Yang. Spermatorrhea accompanied by recurrent fever, night sweat, a red tongue with little coating and a threadlike but rapid pulse is due to depletion of kidney-Yin.

Spermatorrhea may also be seen in mental deterioration, inflammation of the prostate gland and seminal vesicles.

### ***9 Common Symptoms Specific to Women***

The principal symptoms specific to women are disturbances of menstruation, vaginitis, obstetric disturbances and post-partum disturbances.

#### **i Main Disturbances of Menstruation**

**Early Menses** Early menses, seven or more days before the expected time, that are dark red or purple and thick, accompanied by a red tongue and a rapid pulse,

indicates Heat in blood. If the menses are light red in color and thin, the tongue is pale and the pulse feeble then it indicates Qi deficiency.

**Late Menses** Late menses, seven or more days after the expected time, that are light red, thin and scant, accompanied by a pale complexion, a pale tongue and a feeble and threadlike pulse, are due to blood insufficiency. If the menses are dark purple, small in amount but containing clots, and there are cold-aversion with cold limbs and a deep and tight pulse, they are due to Cold congealing the blood vessels. If the menses are pale in color and there are chest tightness, heaviness in the limbs and body and the tongue coating is greasy, they are due to Phlegm-Dampness.

**Irregular Menstruation** Menstruation may come irregularly, sometimes early and sometimes late. If the menses are purplish-red, are scanty and contain clots, and there are distention and pain in the flanks, abdomen, chest and breasts, and a taut pulse, they indicate that liver-Qi has been suppressed and has gelled. If the menses are pale red, thin but variable in quantity, and there are lumbar and knee aches and weakness, anorexia and uncontrolled defecation they indicate insufficiency of both the spleen and the kidney and loss of regulation of the Chong and Ren Meridians.

**Dysmenorrhea** Dysmenorrhea means intermittent lower abdominal pain before, during or following menstruation that is sometimes severe. Distention of the lower abdomen prior to menstruation that is relieved by menstruation suggests Qi stagnation and blood stasis. Cold pain in the lower abdomen during menstruation alleviated by warmth suggests Cold congealing the meridians. Abdominal pain following menstruation with lumbar aches suggest deficiency of Qi and blood. In addition, dysmenorrhea may be seen in a poorly developed uterus, uterine tumor, endometriosis, pelvic inflammatory illness and cerebral cortical dysfunction.

**Amenorrhea** Amenorrhea is the absence of menses following puberty or cessation of menstruation for more than three months. When evaluating amenorrhea in a patient of childbearing age, first determine if the patient is pregnant. In the absence of pregnancy, amenorrhea may be seen in insufficiency of blood, insufficiency of both the liver and the kidney, suppression and gelling of liver-Qi, or blood stasis.

In amenorrhea due to blood insufficiency there are also palpitation of the heart, dizziness, a pallid complexion, a pale tongue and a threadlike and feeble pulse. In amenorrhea due to insufficiency of the liver and the kidney there are also lumbar and knee aches and weakness and dizziness with tinnitus. In amenorrhea due to suppression or gelling of liver-Qi there are also mental depression and a taut pulse. In amenorrhea due to blood stasis there are also stabbing abdominal pain, a dark purple tongue that may have purpuric spots.

Amenorrhea may be seen also in such conditions as sub-cortical brain dysfunction, abnormal development of the genital organs, tuberculosis of the genital organs and endocrine gland dysfunction.

**Vaginal Bleeding** This may be in the form of gushing or chronic dribbling of blood. Strictly speaking it is not directly related to menstruation. If the blood is deep red, large in amount and is accompanied by a red tongue and a rapid pulse it is due

to Heat in the blood. If the blood is purple, contains clots and is accompanied by hematomas in the tongue it is due to blood stasis. If the blood is pale, thin and without clots it is mostly due to injury to the Chong and Ren Meridians or Qi deficiency.

Vaginal bleeding may also be seen in uterine tumor, uterine cervical cancer, ectopic pregnancy or hydatid pregnancy.

## ii Vaginal Discharge

**White Discharge** This is usually thin but large in amount and has no odor. It is due to deficiency of spleen-Qi or Cold-Dampness in the lower body.

**Yellow Discharge** This is usually large in amount and is viscid and malodorous. It is mostly due to accumulated Dampness transforming into endogenous Heat or Dampness-Heat in the lower body.

**Red Discharge** The discharge may be red throughout or interspersed with white. It is usually viscid and is mildly malodorous. It is mostly due to suppressed liver-Qi transforming into Fire and damaging uterine meridians.

Copious vaginal discharge may also be seen in trichomoniasis, candidiasis, gonorrhea, tuberculosis of the uterine cervix, senile vaginitis, uterine tumor or cancer, or cervical cancer.

## iii Some Common Symptoms in Pregnancy

**Vomiting** Vomiting during pregnancy is very common. If accompanied by abdominal distention, fatigue and lassitude it indicates deficiency of spleen and stomach Qi. If accompanied by agitation, irascibility, a bitter taste and regurgitation of acid fluids it indicates liver-Fire disturbing the stomach. If accompanied by epigastric pressure, anorexia, vomiting of sputum or saliva and a greasy tongue coating it is due to turbid Phlegm extending upward.

**Edema** Edema during pregnancy is usually in the lower limbs, but may occasionally extend to the entire body. If accompanied by reduced appetite and ascites it suggests deficiency of spleen-Qi or of spleen-Yang. If accompanied by cold limbs and lumbar and knee aches and weakness it suggests deficiency of kidney-Yang. If accompanied by distention and pain of the flanks and chest it suggests blockage of Qi movement.

**Fetal Distress** This refers to ptosis of the gravid uterus causing pain, sometimes with vaginal bleeding. If there are also aches and pressure in the waist, dizziness and urinary frequency it is due to kidney insufficiency and inability to nurture the Chong and Ren Meridians. If there are also a light yellow complexion, fatigue and weariness, a pale tongue and a depletive and feeble pulse it is mostly due to insufficiency of Qi and blood so that the fetus is not adequately nourished. If there are also distention in the chest and flank, agitation and irascibility, and a taut pulse it

is mostly due to stagnation of liver-Qi. Abdominal pain and vaginal bleeding that result from falling or straining is due to injury to the Chong and Ren Meridians.

The condition of threatened abortion in Western medicine belongs in this category.

#### iv Main Post-partum Symptoms

**Retention of Afterbirth** If accompanied by profuse vaginal bleeding of light-colored blood, shortness of breath and weakness it is due to deficient Qi being unable to expel the afterbirth. If there is also a little vaginal bleeding, with dark red blood containing pieces, and the abdomen is cold and painful it is due to the Cold evil congealing blood and causing stasis.

**Persistent Lochia** This is persistence of post-partum vaginal discharge for longer than 20 days. If the lochia is persistent, large in amount, light in color and thin in texture, and is accompanied by a yellow complexion, fatigue and weakness, the cause is deficient Qi trapped below and unable to ascend and consolidate. If the amount of lochia is large, its color red and its texture thick, and is accompanied by a red complexion, thirst, red urine and a red tongue, the cause is Heat in blood causing blood to course erratically. If the lochia is dark purple, contains pieces of matter, and is accompanied by stabbing pain in the lower abdomen with guarding, and a tongue that is blue or has purpuric spots, the cause is blood stasis in the interior.

**Puerperal Fever** Mild fever during the first day or two following delivery is normal. But if the fever persists or is high it is puerperal fever. Puerperal fever accompanied by cold-intolerance, head and body aches and a floating pulse is due to exogenous pathogenic evil. Mild puerperal fever accompanied by dizziness, blurred vision, palpitation of the heart, shortness of breath, dry feces and constipation is due to blood deficiency giving rise to endogenous Dryness and Heat. High puerperal fever accompanied by agitation, strong thirst with preference for cold drinks, constipation, red urine, a red tongue with yellow coating and a rapid and forceful pulse is due to strong Fire-Heat in the interior.

**Post-partum Convulsion** The principal causes include post-partum blood deficiency, so that the sinews lose their nourishment, exogenous Wind-Cold, which causes spasms in the sinews, and strong Heat generating liver-Wind. When caused by blood deficiency there are also dizziness, palpitation of the heart, a lusterless complexion, a pale tongue and a feeble pulse. When caused by exogenous factors there are also fever, cold-intolerance and a floating and tight pulse. When caused by strong Heat there are also fever, a red tongue with yellow coating, and a rapid pulse.

**Post-partum Constipation** This is mostly due to excessive loss of blood, with blood and fluid insufficiency, and the intestines losing their nourishment. Constipation with sallow complexion, a pale tongue and a threadlike and feeble pulse is due to blood insufficiency. Constipation with a flushed complexion, dry mouth and throat, a red tongue with little coating, and a threadlike and rapid pulse is due to Yin deficiency.

## ***10 Common Symptoms of Sense Organs***

### **i Ear**

**Deafness and Tinnitus** These two conditions result from similar mechanisms and often occur together. Clinically, they could be divided into Strength or Deficiency.

Strength deafness and tinnitus are mostly due to flaming upward of liver-Fire or Dampness-Heat in the liver and the gallbladder. The clinical features are abrupt onset of deafness and tinnitus that persist and are accompanied by thirst, a red complexion, a red tongue with yellow coating and a rapid and forceful pulse.

Deficiency deafness and tinnitus are mostly due to insufficiency of liver-blood, deficiency of liver and kidney Yin, or abnormal ascent of liver-Yang. The clinical features are gradual onset of deafness and tinnitus, persistent course with frequent remissions, dry irritation of both eyes with decline in visual acuity, and a pale tongue; or there are dizziness, hotness in the five centers, a red tongue and a thread-like and rapid pulse.

**Earache** This is mostly due to Dampness-Heat or to the Heat evil attacking the ear. There often is inflammation of the ear or drainage of pus.

### **ii Eye**

**Eye Itch** This is mostly due to blood insufficiency, strong Fire or Wind-Heat. Mild itch with a pale complexion, a pale tongue and a threadlike and feeble pulse indicates blood insufficiency, hence failure to nourish eyes. Severe itch with inflamed sclera, a red tongue with yellow coating and a rapid pulse indicates Fire-Heat. Extreme itch of both eyes with light-sensitivity and tearing indicates Wind-Heat.

**Dry and Irritated Eyes** This is mostly due to insufficiency of liver-blood or insufficiency of liver and kidney Yin. In either case the mechanism is the eyes losing their nourishment because of insufficiency of Yin-blood.

**Eye Distention** This is a subjective sensation of internal pressure forcing the eye to stretch. If accompanied by inflammation of the sclera, eyestrain, a red tongue with yellow coating and a rapid pulse it is due to exogenous Wind-Heat. If accompanied by a bitter taste and dry throat, distention and pain in the flanks and a taut pulse it is due to flaming upward of liver-Fire or abnormal ascent of liver-Yang.

**Night-Blindness** This is mostly due to insufficiency of liver-blood and deficiency of liver and kidney Yin, so that the eyes lose their nourishment.

### **iii Nose**

**Nasal Congestion** This is mostly due to exogenous Wind-Cold or Wind-Heat invading the lung, so that lung-Qi fails to ascend and act fully. If due to Wind-Cold

there is also drainage of much clear discharge. If due to Wind-Heat there is also drainage of turbid discharge.

**Nasal Pain** This is principally due to lung-Heat or stomach-Heat rising to the nose. There often are fever, cough, thirst and a red tongue with yellow coating. Sometimes there is constipation as well.

#### iv Oral Cavity

**Taste** Sometimes patients have a taste in the mouth that is not related to eating or drinking. Such information provides additional clues of illnesses.

A bitter taste indicates Heat, and is mostly seen in Dampness-Heat in the liver and the gallbladder, flaming upward of liver-Fire or Heat in the stomach.

A sweet taste is mostly seen in Dampness-Heat in the spleen and stomach or Dampness accumulation in a deficient spleen.

A salty taste is seen in kidney illnesses and Cold.

A sour taste is seen in Heat accumulation in the liver and the stomach or in indigestion from overeating.

Blandness (complete absence of taste) indicates deficiency of spleen and stomach Qi.

**Sores or Ulcers** Inflamed aphthous sores or ulcers that are very painful and are accompanied by much thirst, dry feces and a rapid and forceful pulse are due to strong Fire-Heat. If they are pale red and not painful and there are hotness feeling in the “five centers”, a red tongue with little coating and a threadlike and rapid pulse they are due to blazing Fire due to Yin deficiency.

**Tongue Pain** Tongue pain caused by Fire-Heat may be due to strength or deficiency. Tongue pain due to Heat strength is mostly due to flaming upward of strong Fire in the heart, the liver or the stomach. Tongue pain due to deficiency is mostly due to deficiency of heart, liver or kidney Yin, which permits Fire to arise and to flame upward.

**Tongue Numbness** This is mostly due to deficiency of blood or Qi, so that the tongue loses its nourishment. It may also be due to Phlegm blocking the tongue meridians.

## Guidance for Study

### I Aims of Study

This chapter describes the diagnostic methods of CM and their clinical applications. These methods – Inquiry, Inspection, Auscultation and Olfaction, and Palpation – aim to provide the basis for syndrome analysis and differential diagnosis.

## II Objectives of Study

After completing this chapter the learners will

1. Be familiar with the fundamentals of CM diagnosis;
2. Be familiar with the principles of CM diagnosis;
3. Know the main contents of each method of diagnosis and its clinical significance.

## III Exercises for Review

1. Describe the logic of the method of inspection. In what ways can observations from inspection provide clues to the general or local pathological changes of illnesses?
2. Describe how the abnormalities of the tongue coating provide clues to the variety of illnesses, especially illnesses of Heat?
3. Describe how about the abnormal changes of body of the tongue and their relevant clinical significance?
4. Classify the main abnormalities of the pulse, with special reference to its location, frequency, and force. Briefly describe the main pulse profiles.
5. Describe the principal features of diagnosis by the method of inquiring and diagnosis by auscultation and olfaction. Compare them to the corresponding features of diagnosis in Western medicine.
6. Describe how illnesses can be correctly diagnosed only by the combined use of the four diagnostic methods? Give examples to explain their clinical application.

## Chapter 9

# Differential Diagnosis

During and following the gathering of clinical information the physician applies the process of symptom analysis on the symptoms, signs, physical conditions and pathogenic factors of the patient so as to determine the general condition of the patient and his illnesses, including the pathological changes, and to ascertain the pattern of true symptoms which are called as “Syndromes”. The next step is the process of differential diagnosis, whereby on the basis of the emerged patterns of true symptoms the physician infers the final diagnosis: the identity of the illness, its nature, its cause and its expected course. Thus, in the full process of diagnostics in CM the first step is ascertaining the symptoms, the second step is symptom analysis and the final step is differential diagnosis on the pattern of symptoms (syndromes). Only if the diagnosis is accurate can treatment be rational, appropriate and effective.

CM uses several approaches to differential diagnosis. The principal ones are the following: (1) diagnosis by the Eight Fundamentals, (2) diagnosis by Qi and blood, (3) diagnosis by the *zang-fu* organs, (4) diagnosis by the Six Meridians, (5) diagnosis by the Four Phases, and (6) diagnosis by *sanjiao*.

Each of these approaches has its own characteristics and scope of application. Diagnosis by the Eight Fundamentals is the broadest and is generally appropriate for the clinical diagnosis of all illnesses. Diagnosis by Qi and blood and diagnosis by the *zang-fu* organs are most appropriate for illnesses of internal injury and miscellaneous conditions. The last three approaches, diagnosis by the Six Meridians, by the Four Phases and by *sanjiao*, are most appropriate for illnesses caused by exogenous pathogenic evils.

### Section 1 Diagnosis by Eight Fundamentals

The Eight Fundamentals comprise four pairs of opposites: Yin and Yang, exterior and interior, Cold and Heat, and deficiency and strength.

Although the symptoms of an illness may be many and bewildering, fundamentally they can all be categorized along these four dimensions by means of the Eight Fundamentals. An illness may be classified as Yin or Yang in type. Its depth may

be located in the exterior or the interior of the body. Its nature may be recognized as pertaining to Cold or Heat. Its ascendancy or decline may be related to deficiency of some aspect of genuine Qi or to strength of some pathogenic evils. Thus, the Eight Fundamentals are an overarching organizing principle for all illnesses.

The Yin fundamental encompasses the interior, the Cold and the deficiency fundamentals; and the Yang fundamental encompasses the exterior, the Heat and the Strength fundamentals. Hence Yin–Yang is the dimension that subsumes the other three.

Each of the Eight Fundamentals has associated characteristic symptoms that form a characteristic pattern. But these patterns of symptoms are not entirely distinctive; nor do they remain unchanging, often changing into one another. Sometimes there may even be false symptoms. It is therefore important, in the course of clinical diagnosis, to pay attention to the differentiation between them, to the interaction and interchanges between them, and to the trueness and falsity of the symptoms. Only then can the physician reach an accurate diagnosis.

## I Diagnosis of Exterior–Interior

The exterior–interior dimension concerns the location of illness. It provides a means of determining the depth of the pathological processes.

Exterior and interior are opposing and relative concepts. In regard to the body, the exterior refers to the somatic body, whereas the interior refers to the internal organs (viscera). In regard to the internal organs, the *fu* organs are exterior and the *zang* organs are interior.

Differentiation of exterior–interior is especially important when treating an exogenously induced illness. Its significance lies not only in determining the depth of involvement and the degree of severity, but also the tendency of change of the illness. In general, if the illness is in the exterior it is superficial and mild, whereas if it is in the interior it is deep and severe. Movement from the exterior to the interior reflects worsening of the illness. Movement from the interior to the exterior reflects improvement. Accurate determination of exterior–interior is thus essential for grasping the course of the illness, devising an appropriate method of treatment, and obtaining satisfactory results.

### 1 Exterior Syndrome

Syndromes of the exterior are those that result when exogenous pathogenic evils attack the body's superficies. They are commonly seen in the initial stages of exogenous illnesses. Characteristically, exterior symptoms are of abrupt onset and a short course.

When the six exogenous pathogenic evils are lodged in the exterior they block the normal dispersion of defensive Qi. In response genuine Qi rises to battle evil Qi, and this battle gives rise to the exterior symptoms.

Typical exterior syndrome is the following: fever with cold-aversion, headache, body aches, a thin white tongue coating and a floating pulse. Sometimes, there are also nasal congestion and drainage, throat irritation and coughing.

## **2 *Interior Syndrome***

Syndromes of the interior indicate that the abnormal processes are located in the interior of the body and reflect dysfunction of the visceral organs, Qi and blood. They are commonly seen in the later stages of exogenous illnesses as well as in illnesses of internal injury and a variety of miscellaneous conditions. Characteristically, interior symptoms have complex causation, are deeper in location, and have a longer course.

The range of interior symptoms is very broad; indeed, all symptoms other than exterior symptoms may be regarded as interior symptoms. They can also result from many mechanisms: transmission of an exterior illness into the interior, where the exogenous pathogenic evil attacks the visceral organs, direct invasion of the visceral organs by exogenous evils, injury by the seven passions, dietary overindulgence, physical over-exertion, and others. These processes all injure the visceral organs causing disturbance of their functions and disorderly activities of Qi and blood.

Because of the complexity in their causation and variability of their location, interior symptoms are quite variable and often show mixed symptoms of Cold, Heat, deficiency and strength. Specific interior symptoms will be described in the descriptions of the various diseases. The following list includes only the most common and typical interior symptoms: high fever without cold-aversion, thirst, dry constipation, dark oliguria, a thick tongue coating and a deep pulse.

## **II *Diagnosis of Cold–Heat***

The dimension of Cold–Heat concerns the nature of an illness.

The presence of syndromes of Cold or of Heat reflects the unbalanced excess or deficiency of Yin or Yang. Yin excess or Yang deficiency manifests Cold symptoms, whereas Yang excess and Yin deficiency manifests Heat symptoms. For this reason the Ming dynasty physician Zhang Jingyue said, “Cold–Heat – they are the manifestation of changes in Yin–Yang.”

In differentiating Cold and Heat, it is not sufficient to judge on the basis of individual patterns of the symptoms. The physician must analyze the entire pattern of symptoms established by all the diagnostic methods in order to reach a firm conclusion. Symptoms of Cold or Heat reflect the nature of the illness. As a rule, Cold

symptoms include those that relate to coldness and Heat symptoms include those that relate to hotness. However, the symptoms of coldness can differ from the symptoms of Cold, and similarly the symptoms of hotness can differ from the symptoms of Heat. The symptoms of coldness and of hotness are merely the apparent manifestation of the illness. In some situations they may in fact be opposite of the Cold or Heat nature of the illness. In such situations we may have true or false symptoms of Cold–Heat. Thus, if the illness is one of Cold but manifests some syndromes of hotness it is a case of true Cold with false Heat symptoms. If the illness is caused by Heat but manifests some symptoms of coldness it is a case of true Heat with false Cold symptoms. But in the course of the majority of illnesses the nature and the appearance of the illness tend to agree – that is, a Cold illness tends to manifest coldness symptoms and a Heat illness tends to manifest hotness symptoms.

Differentiation of Cold–Heat is the basis for the selection of therapeutic principle and the choice of specific treatment. As the *Plain Questions* states: “If Cold warm it” and “If Heat cool it.” This clearly underscores the importance of Cold–Heat differentiation to clinical therapeutics.

## 1 Cold Syndromes

Syndromes of Cold are those of illnesses of Cold nature. Such illnesses mostly result from attack by exogenous Cold, deficiency of Yang or excess of Yin, or Yang damage by chronic illnesses. Because of differences in the location of the illnesses, Cold syndromes may be further categorized as symptoms of exterior Cold or of interior Cold.

**Cold Syndrome in the exterior** result from exogenous Cold attacking the superficies and thwarting defensive Yang. A typical pattern of clinical findings is the following: marked cold-intolerance with mild fever, headache and body aches, absence of sweating, a thin white but moist tongue coating, and a pulse that is floating and tight.

**Cold Syndrome in the interior** result from exogenous Cold directly invading the visceral organs or from deficiency of the body’s Yang-Qi leading to the loss of its warming action. A typical syndrome of clinical findings is the following: cold body and limbs, a pallid complexion, a bland taste with much saliva, polyuria of clear urine and loose feces, a pale tongue with white and moist coating, and a deep and slow pulse.

## 2 Heat Syndromes

Syndromes of Heat reflect hyperactivity of bodily functions. They result mostly from attack by exogenous Heat, the passions transforming into Fire, or Yin

deficiency and Yang excess. With either strong Yang Heat or insufficiency of Yin-fluids to restrain Yang the bodily functions become hyperactive. As a result the patient manifests hotness symptoms. Heat syndromes may also be categorized as exterior or interior.

**Heat Syndromes in the exterior** result from exogenous Heat attacking the superficies. A typical syndrome of clinical findings is the following: fever with mild aversion to wind or cold, a dry mouth with mild thirst, a tongue with red tip and sides, yellow tongue coating, and a rapid pulse. Sometimes there may be an additional symptom of sweating or cough.

**Heat Syndromes in the interior** result from strong exogenous Heat in the interior or endogenous Heat arising from Yin deficiency. A typical syndrome of clinical findings is the following: flushed complexion, fever, mental confusion and agitation, thirst with desire to drink, dark oliguria and dry constipation, a red tongue with yellow coating, and a rapid pulse.

### 3 *True and False Cold–Heat Syndromes*

In certain serious diseases, when the illness has reached a critical stage of extreme Cold or extreme Heat there may appear symptoms that appear to be opposite of the nature of the illness. Thus, a Cold illness may in such circumstances present symptoms of hotness, and a Heat illness symptoms of coldness. These are known as “extreme Cold resembles Heat” and “extreme Heat resembles Cold.” They are also known as “true Cold, false Heat” and “true Heat, false Cold.”

**True Cold, False Heat** This means there is true Cold in the interior but symptoms of hotness in the exterior. Typically the apparent symptoms are fever, a superficial redness on the face, thirst and a large pulse. These seem to suggest Heat, but further observation shows that though feverish the patient prefers warmth; though the face is red it is tender and the redness fluctuates; though thirsty the patient prefers warm drinks; and though the pulse is large it is deep and forceless. Moreover, the four limbs are cold, the urine is clear and copious, the feces are loose, and the tongue is pale with white coating – symptoms of Cold in the interior. Thus, the symptoms of hotness are false and the nature of the illness is of Yang deficiency and Yin excess. This situation is one of strong interior Yin-Cold pushing the deficient Yang to the exterior; hence it is also known as “the syndrome of excess Yin expelling Yang.”

**True Heat, False Cold** This means there is true Heat in the interior but symptoms of coldness in the exterior. Typically the symptoms of coldness are cold-intolerance, cold hands and feet, diarrhea, a black tongue coating and a deep pulse. These seem to suggest Cold, but further observation shows that though cold the patient avoids warmth and the chest and abdomen are feverish. Though there is diarrhea the feces have a fetid odor and are partly dry; and though the pulse is deep it is forceful. Moreover, the throat is dry and there is halitosis, the patient is thirsty and prefers cold

drinks, the tongue is red or crimson, and the urine is scanty and dark. Sometimes there may even be mental confusion and delirium. Thus, the symptoms of coldness are false Cold and the nature of the illness is of interior Heat. The main mechanism is strong Heat in the interior trapping Yang-Qi internally so that it cannot reach the limbs. Alternately, Yang-Qi is excessive in the interior and pushes Yin to the exterior. Hence, it is also known as “the syndrome of excess Yang expelling Yin.”

In ascertaining the trueness and falsity of Cold–Heat, it is necessary first to understand the entire course of the illness. In true Cold with false Heat the illness usually begins with Cold and only subsequently produces hotness. In true Heat with false Cold the illness usually begins with Heat and only subsequently produces coldness. Also, the apparent and false symptoms tend to reside in the limbs, the skin or the complexion, whereas the changes in the visceral organs, Qi and blood and the fluids are what reflect the true nature of the illness. Hence, in the process of differential diagnosis it is important to rely on the symptoms of the interior, the appearance of the tongue and the pulse profile as the principal basis.

Moreover, the apparent and false symptoms are not identical with their corresponding true symptoms. Consider the symptom of red face, for example. In true Heat the entire face is red, whereas in false Heat the redness is limited to the cheeks and the red is superficial and intermittent. For the symptom of cold limbs, in true Cold the patient tends to lie in a curled up posture and desires to be covered, whereas in false Cold the chest and abdomen are feverish and the patient refuses to be covered.

### **III Diagnosis of Deficiency–Strength**

The deficiency–strength dimension concerns the relative rise and fall of evil and genuine Qi in the ill body. Deficiency means deficiency of genuine Qi. Strength means strength of evil Qi. In the differentiation of deficiency–strength an illness of deficiency is one in which genuine Qi of the body is relatively deficient but evil Qi is not extremely strong. An illness of strength is one in which evil Qi is too strong but genuine Qi has not been depleted, so that evil Qi and genuine Qi are still engaged in fierce battle.

Differentiation between deficiency and strength and understanding of the relative rise and fall of genuine Qi and evil Qi are the basis upon which the physician selects whether to use the therapeutic principle of restoration or that of catharsis.

#### **1 Deficiency Syndromes**

Deficiency is the general term applied to all clinical conditions in which the body’s genuine Qi is weakened. It arises mostly from poor prenatal endowment, inadequate postnatal acquired nourishment, or attrition by a variety of illness or injury. In all

these conditions one or several of the following aspects of Qi or Qi activity may become deficient or show reduced activity: Yin, Yang, Qi, blood, fluids, essence, marrow, and the functional activities of the visceral organs.

Thus the range of illnesses of deficiency is very broad, including deficiency of Qi, insufficiency of blood, deficiency of Yang, deficiency of Yin, and insufficiency of one or more of the *zang-fu* organs. Their clinical presentations can be equally varied, though they all share certain common characteristics. The patient's bodily constitution tends to be weak, the mental status lethargic and dispirited, and the voice soft and respiration shallow. There is often pain that is alleviated by pressure. The tongue tends to be tender, with a thin or scant coating, and the pulse tends to be forceless.

Clinically, CM classifies illnesses of deficiency in two categories: deficiency of the exterior and deficiency of the interior.

**Deficiency in the Exterior** There are two main varieties of deficiency of the exterior. In one variety, the illness results from attack in the exterior by exogenous Wind. The characteristic symptoms are wind-aversion, sweating and a floating and even pulse. This pattern indicates an illness of exogenous exterior deficiency. In the other variety, there is deficiency of lung and spleen Qi so that defensive Qi is unable to secure the superficies from spontaneous sweating and susceptibility to attack by exogenous evils. Such patients tend to fall ill readily and often upon exposure to exogenous pathogenic evils. In addition to the typical exterior symptoms the pattern characteristically includes syndrome of Qi deficiency, such as fatigue and weakness, shortness of breath on exertion, decreased appetite, loose feces, and a threadlike and feeble pulse.

**Deficiency in the Interior** This large category comprises all illnesses of involving insufficiency of any of the visceral organs or deficiency of Yin, Yang, Qi or blood. According to the nature of Cold or Heat, deficiency illnesses in the interior fall in two broad groups: deficiency-Cold and deficiency-Heat. In deficiency-Cold the body's Yang-Qi is deficient so that endogenous Cold develops; hence it is also known as Yang deficiency. In deficiency-Heat the body's Yin-blood is deficient so that Yin is unable to restrain Yang and permits endogenous Heat to develop. It is also known as syndrome of Yin deficiency. These conditions are further described below (Subsection IV, Sub-subsection 2).

## 2 *Strength Syndromes*

An illness of strength is the general term applied to all clinical conditions in which an exogenous pathogenic evils has attacked the body or products of pathological processes induced by the exogenous evil linger in the body. It applies generally to the initial or mid stages of illnesses and usually has a relatively short course. (In this context, "strength" refers to the strength of evil Qi.)

Because of the variety of exogenous evils and the many different responses of the body, the clinical manifestation of strength illnesses is highly variable. However, in

general, in a patient with a strength illness the constitution is still strong, the mental status is vigorous, the voice and respiration are strong, the tongue is firm and has a thick coating, and the pulse is forceful.

The main clinical types of strength illnesses are strength in the exterior, Cold strength, and Heat strength illnesses.

**Strength in the Exterior** An illness of strength in the exterior, or exterior strength for short, results when an exogenous evil has attacked the body and Yang-Qi has responded by gathering in the superficialities to do battle with evil Qi. In addition to the standard exterior symptoms, the characteristic pattern of clinical symptoms includes absence of sweating, headache, body aches and a floating and tight pulse. These are mainly syndrome of Cold in the exterior.

**Cold Strength** An illness of Cold strength results from strong attack by exogenous Cold, which subdues Yang-Qi. Consequently, there are such symptoms as cold-aversion, cold limbs, a pallid complexion, abdominal pain with guarding, constipation or borborygmus with diarrhea, coughing with much sputum and increased clear urine. The tongue coating is white and moist or thick and greasy, and the pulse is slow or tight.

**Heat Strength** An illness of Heat strength results from strong attack by exogenous Heat that transmits from the exterior to the interior. Strong Heat scorches the body fluids. Consequently, there are such symptoms as high fever, restlessness, flushed complexion with inflamed eyes, mental confusion with delirium, abdominal distention and pain with guarding, dry feces and dark urine. The tongue coating is yellow and thick or greasy and the pulse is surging and rapid or slippery and rapid.

## IV Diagnosis of Yin–Yang Syndromes

Yin and Yang syndromes are the chief of the Eight Fundamentals. The others are really their developments. Syndromes of Yin–Yang fall into the following six categories, each with its typical pattern: Yin syndromes, Yang syndromes, syndrome of Yin deficiency, syndrome of Yang deficiency, syndrome of Yin depletion and syndrome of Yang depletion.

### 1 *Yin–Yang Syndromes*

**Yin syndromes** are those that generally conform to the nature of Yin. Yin syndromes encompass all interior symptoms, deficiency symptoms and Cold symptoms.

Clinically, Yin syndromes are many and varied. The most commonly seen are the following: dark or dusky complexion, despondency, heaviness of the body with passivity, cold-aversion with cold limbs, fatigue and weakness, soft and low voice, anorexia, diarrhea and increased clear urine. The tongue is pale, plump and tender, and the pulse is deep, and slow or feeble, or threadlike and impeded.

**Yang syndromes** are those that generally conform to the nature of Yang. Yang syndromes encompass all exterior syndromes, Strength syndromes and Heat syndromes.

Clinically, Yang syndromes are also many and varied. The most commonly seen are the following: flushed face with red eyes, chills and fever, restlessness, coarse respiration, loud and high voice, constipation and decreased dark yellow urine. The tongue is red or crimson, with yellow and dry coating. The pulse is floating and rapid, surging and large, or slippery and replete.

## 2 *Yin–Yang Deficiency Syndromes*

**Syndrome of Yin deficiency** is those of Heat that develop when Yin and essence are damaged, so that Yin is unable to restrain Yang. Yang-Qi then acts with little opposition and Fire arising out of Yin deficiency flames upward. The typical pattern of Yin deficiency symptoms includes emaciation, a dry mouth and throat, dizziness with blurred vision, palpitation of the heart, insomnia, hotness in the five centers, recurrent fever, night sweat, flushed cheeks, a red tongue with little coating, and a threadlike and rapid pulse.

**Syndrome of Yang deficiency** is those of Cold that develop when Yang-Qi is damaged, so that Yang is unable to restrain Yin. The deficient Yang-Qi fails in its actions of providing motive force or warmth. In contrast, Yin-Qi becomes poorly restrained and gives rise to deficiency-Cold. The typical pattern of Yang deficiency symptoms is as follows. There are fatigue with weakness, shortness of breath, reluctance to speak, somnolence with desire to curl up, cold-aversion with cold limbs, tastelessness, absence of thirst or excessive drinking of warm drinks, clear urine, loose feces, and a pale complexion. The tongue is pale and plump, and the pulse is deep, slow and forceless.

## 3 *Yin–Yang Depletion Syndromes*

Depletion of Yin or Yang is a critical condition. If rescue is delayed or inadequate, death may ensue.

Because Yin and Yang are mutually dependent and supportive in their mutual opposition, depletion of one can lead to depletion of the other.

**Syndrome of Yin depletion** is those that result from massive exhaustion or loss of Yin fluids so that Yin verges on total collapse. Yin depletion comes about mainly because of high fever, profuse sweating, protracted vomiting or diarrhea, or massive blood loss. Any illness of extreme Heat or extreme Yin deficiency can easily end in Yin depletion. Because of the depletion of Yin fluids, deficiency-Heat arises and disturbs the interior. Consequently, the main symptoms of Yin depletion are profuse

warm and sticky sweat, hot body and limbs, restlessness, short and rapid respiration, thirst with preference for cold drinks, dry lips and tongue, wrinkled skin, oliguria, and a threadlike, rapid and forceless pulse. These constitute the typical pattern of deficiency-Heat.

**Syndrome of Yang depletion** is those that result from massive exhaustion of Yang-Qi approaching the point of total collapse. Because Qi escapes with fluids Yang depletion often follows excessive sweating, vomiting, diarrhea or massive blood loss. In a patient with chronic Yang deficiency or exuberant Cold Yang depletion can also develop readily. Weakened Yang-Qi is unable to solidify and astringe. As a result, such symptoms of deficiency-Cold may appear: profuse cold sweat, cold body with cold-aversion, weariness and lying in curled position, weak and shallow breathing, tastelessness without thirst, pallid complexion, a pale but moist tongue and an indistinct pulse that is on the verge of stopping.

## Section 2 Diagnosis by Qi and Blood

In diagnosis by Qi and blood the physician analyzes symptoms and, on the basis of the pattern of symptoms resulting from the physiological actions of Qi and blood and characteristic pathological changes of the illness, differentiates between illnesses of Qi and of blood.

Qi, blood and fluids are the basic substances that constitute the body and the basis of its vital functions. The physiological actions of Qi, blood and fluids are intimately linked with the physiological functions of the *zang-fu* organs. In pathology these two groups also intimately influence each other. Hence, diagnosis by Qi and blood is often carried out together with diagnosis by the visceral organs.

There are three main categories of syndromes of Qi and blood: syndromes of Qi, syndromes of blood, and syndromes of both Qi and blood.

### I Qi Syndromes

Qi syndromes are those that result from abnormal activities of Qi. Clinically, they fall in four typical patterns: syndrome of Qi deficiency, syndrome of Qi collapse, syndrome of abnormal Qi movement, and syndrome of Qi stagnation.

#### 1 Qi Deficiency

Syndromes of Qi deficiency are those that develop when the functions of the organ systems of the body are impaired.

**Pathology** Qi-deficiency syndrome mostly arise in a patient who has a chronic illness, a serious illness, exhaustion by physical labor, or a senile and weak constitution with decline of genuine Qi. Qi is the motive force behind the many organs' functional activities. If Qi is deficient these organic functions decline as well, and this decline produces the various symptoms.

**Clinical Manifestation** The typical syndrome of Qi deficiency includes lassitude, fatigue with weakness, short respiration with reluctance to speak, dizziness with blurred vision, spontaneous sweating, a pale tongue and a feeble pulse. The symptoms tend to be aggravated by any physical exertion.

## 2 *Qi Sinking*

In Qi sinking Qi is so weakened that it is unable to ascend but sinks instead.

**Pathology** Qi sinking is usually due to progression of Qi deficiency or damage to visceral Qi by exhaustion from physical labor. Because deficient Qi is unable to ascend or to raise, the organs cannot maintain their positions and clear Qi cannot rise. As a result, many visceral organs may droop or prolapse and clear Qi sinks.

**Clinical Manifestation** The typical syndrome of Qi sinking includes lassitude with weakness, shortness of breath, dizziness with blurred vision, chronic diarrhea or dysentery, abdominal distention, prolapse of the rectum or the uterus, ptosis of the stomach or the kidney, a pale tongue and a feeble pulse.

## 3 *Abnormal Qi Movement*

Abnormal Qi ascent refers to disturbances of Qi movement so that Qi ascends when it normally descends. Clinically, this mostly affects lung, stomach and liver Qi.

**Pathology** Abnormal ascent of lung-Qi is mostly due to exogenous pathogenic evils attacking the lung, turbid Phlegm accumulating in the lung or the lung losing its function of depuration. Abnormal ascent of stomach-Qi is mostly due to exogenous pathogenic evils attacking the stomach, retention of food, or accumulation of Cold-Rheum or turbid Phlegm in the stomach. Abnormal ascent of liver-Qi is mostly due to liver injury by pent-up rage, hyperactive liver-Qi or abnormal ascent of Qi-Fire.

**Clinical Manifestation** The typical syndrome of abnormal lung-Qi ascent includes coughing and labored breathing. The typical syndrome of abnormal stomach-Qi ascent includes hiccup, eructation, nausea and vomiting. The typical syndrome of

abnormal liver-Qi ascent includes dizziness and distending headache; sometimes there may be syncope or hematemesis.

## 4 *Qi Stagnation*

Syndrome of Qi stagnation develop when there is blockage of the movement of the Qi of a part of the body or an organ.

**Pathology** Suppression of the passions, dietary indiscretion, exogenous pathogenic evils, Phlegm–Rheum accumulation and blood stasis can all impede or block Qi movement, and lead to syndrome of Qi stagnation.

**Clinical Manifestation** The typical syndrome of Qi stagnation includes distention and pain in the chest, epigastrium and abdomen. The pain tends to be migratory and fluctuating; it is often alleviated by eructation or farting, but aggravated by frustration of the passions.

## II Blood Syndromes

Blood syndromes are those arising when blood or fluids are insufficient or move abnormally. The most common types are those due to blood insufficiency, blood stasis, Heat in the blood and Cold in the blood.

### 1 *Blood Insufficiency*

Syndromes of blood insufficiency result when there is insufficiency of blood, so that blood is unable to nourish the visceral organs, meridians and tissues.

**Pathology** Blood insufficiency can result from many conditions, including a variety of slow or rapid bleeding. Chronic brooding, fatigue and prolonged illness can damage Yin-blood. Dysfunction of the spleen and stomach may impair the body's ability to extract nutrients from foods and drinks, hence failure to nourish blood. Blood stasis in the interior may cause blockage and prevent the generation of new blood. In all these conditions insufficient blood fails to provide nourishment to the *zang-fu* organs and the rest of the body.

**Clinical Manifestation** The typical syndrome of blood insufficiency includes a pallid or sallow complexion, lips, tongue and nails, dizziness with blurred vision, palpitation of the heart with insomnia, numbness of the hands and feet, roughness of the skin and a threadlike and forceless pulse. In women the menses are reduced and light in color, delayed or absent.

## 2 *Blood Stasis*

Syndromes of blood stasis result from obstruction of blood flow or from the extravasation of blood.

**Pathology** Blood stasis usually results from Qi stagnation, Qi deficiency or congealing of blood by Cold. When Qi becomes stagnant blood circulation is impeded. When Qi is deficient blood circulation loses its motive force. When Cold congeals blood, blood circulation becomes difficult. Alternately, extravasated blood may accumulate in the body and form a hematoma, which can obstruct the movement of both Qi and blood. In both cases there are typical symptoms of blood stasis, such as pain, swelling, bleeding, and cyanosis of the lips and tongue.

**Clinical Manifestation** The typical syndrome of blood stasis includes stabbing pain in fixed location aggravated by pressure and worse at night, hard and fixed abdominal mass, subcutaneous hematoma or purpura, cyanosis of the complexion and lips and scaly skin. In addition, women often have amenorrhea. The tongue is cyanotic and may be speckled with purpura or petechiae. The pulse is threadlike and impeded.

## 3 *Heat in Blood*

Syndromes of Heat in the blood appear when Fire blazes internally and reaches the Blood Phase (see below, [Section 5](#)).

**Pathology** Heat in the blood can result from attack by exogenous Heat evil, transformation of the passions into Fire, overindulgence in alcohol or strong spices and blazing of endogenous Fire. In all these conditions Heat or Fire can oppress the Blood Phase and induce symptoms of Heat in the blood. Propelled by Heat or Fire, blood courses erratically and extravasates or bleeds, and the extravasated blood then gives rise to a variety of symptoms.

**Clinical Manifestation** Heat in the blood typically manifests as hemoptysis (coughing up blood), hematemesis (vomiting of blood), bleeding from the eyes, ears, nose, mouth or subcutaneous tissues, hematuria (blood in the urine), or hematochezia (fresh blood in the feces). Women often show early and excessive menses. In addition to such bleeding, the typical pattern includes restlessness, thirst, a red or crimson tongue and a slippery and rapid pulse.

## 4 *Cold in Blood*

Syndromes of Cold in the blood result when the Cold evil congeals blood, so that blood cannot circulate freely.

**Pathology** When exogenous Cold attacks and lodges in the meridians, it impedes Yang-Qi. Both Qi and blood become gelled.

**Clinical Manifestation** The typical syndrome of blood-Cold is as follows. There is cold pain in the hands and feet or in the lower abdomen, alleviated by warmth, and cold-intolerance with preference for warmth. The cold hands and feet are cyanotic and cannot be warmed. Women may have irregular menstruation, with dysmenorrhea and dark purple menses with clots. The tongue is pale and dusky and has a white coating. The pulse is deep, slow and impeded.

### III Simultaneous Qi and Blood Syndromes

“Qi is the mother of blood, and blood is the mother of Qi.” Physiologically they depend upon each other, use each other and stimulate each other. Pathologically they also influence each other, serve as cause and effect for each other and induce illnesses together.

#### 1 *Qi Stagnation and Blood Stasis*

Syndromes of Qi stagnation and blood stasis arise when blockage of Qi movement induces stasis of blood.

**Pathology** Frustration of the passions or physical trauma can both cause failure of liver function, and failure of liver function in turn can impede Qi movement and blood circulation.

**Clinical Manifestation** The typical syndrome is as follows. There are chest and flank distention with migratory pain, emotional depression or irascibility, and painful flank mass with guarding. Women may also have premenstrual breast distention and pain, dysmenorrhea with dark purple menses containing clots, or amenorrhea. The tongue is dark purple with purpura and the pulse is taut and impeded.

#### 2 *Deficiency of Both Qi and Blood*

**Pathology** This condition usually arises in prolonged illnesses so that both Qi and blood are injured. Alternately, one may become deficient and lead to deficiency of the other. If blood is insufficient there is insufficient source for Qi transformation; conversely, if Qi is deficient it is unable to generate blood.

**Clinical Manifestation** The typical syndrome of deficiency of both Qi and blood is as follows. There are shortness of breath with reluctance to speak, weariness, dizziness with blurred vision, spontaneous sweating, palpitation of the heart, insomnia and a pallid or sallow complexion. The tongue is pale and tender and the pulse is threadlike and forceless.

### 3 *Qi Deficiency with Bleeding*

This is a situation in which deficient Qi is unable to control blood flow, resulting in bleeding. The main symptoms are those of bleeding.

**Pathology** This condition arises mostly from Qi deficiency resulting from prolonged illnesses, with chronic fatigue injuring the spleen. Deficient Qi cannot govern blood. Consequently blood does not remain in its usual pathways but extravasates, leading to bleeding from various sites.

**Clinical Manifestation** The most common forms of bleeding are the following: hematemesis, hematochezia, ecchymosis or petechiae, gingival bleeding and metrorrhagia (uterine bleeding). In addition to bleeding, the typical syndrome also includes shortness of breath, spontaneous sweating, weariness with weakness, and a pale complexion. The tongue is pale and the pulse is threadlike and feeble.

### 4 *Massive Blood Loss with Qi Depletion*

This is a situation in which blood loss leads to Qi depletion.

**Pathology** This results mostly from trauma or severe injury to the *zang* organs, which causes massive blood loss. In women, it is often due to severe metrorrhagia or excessive bleeding during childbirth. Since blood is the carrier for Qi, massive blood loss depletes Qi.

**Clinical Manifestation** Massive blood loss leads to sudden facial pallor, profuse sweating, cold limbs, feeble respiration, and mental confusion or syncope. The tongue is pale. The pulse is indistinct and on the verge of collapse, or floating and large but scattered.

## Section 3 **Diagnosis by Visceral Organs**

Diagnosis by the visceral organs is a technique for assessing an illness on the basis of the physiological functions and pathological changes of the visceral organs. Careful symptom analysis produces the pattern of symptoms (the syndrome), which enables

the physician to infer the pathological processes and the location and nature of the illness for appropriate treatment, and to assess the relative rise and fall of genuine and evil Qi. Accurate diagnosis of the visceral organs affected and the nature of the illnesses enable the physician to aim treatment with precision.

Diagnosis by the visceral organs has an intimate link to diagnosis by the Eight Fundamentals and to diagnosis by Qi and blood. Furthermore, it is the foundation for diagnosis by the Six Meridians, diagnosis by the Four Phases and diagnosis by sanjiao. Though the last three techniques are designed principally with exogenous illnesses in mind, the underlying pathological processes of exogenous illnesses are those of the *zang-fu* organs, Qi and blood, and Yin–Yang. Thus, diagnosis by the visceral organs may be regarded as the basic diagnostic technique in CM and the foundation for all clinical diagnostic techniques.

Diagnosis by the visceral organs is principally centered on the five *zang* organs.

## I Heart Illnesses

The main symptoms of illnesses of the heart relate to the heart itself, the blood channels and the mind.

### 1 *Deficiency of Heart-Qi*

These are several syndromes that arise because of impairment of the heart's functions caused by deficiency of heart-Qi.

**Pathology** Deficiency of heart-Qi is mostly due to decline of organ Qi (functions) in the elderly, inadequate prenatal endowment, or damage by prolonged illness or sudden severe illness. When heart-Qi is inadequate the heartbeat is weak and blood circulation becomes sluggish. As a result, the heart and the entire body lose nourishment, and this can lead to reduction in the functional activity of the heart and all the organ systems in the body.

**Clinical Manifestation** The typical syndrome of heart-Qi deficiency is as follows. There are palpitation of the heart, shortness of breath and chest tightness that are aggravated by physical exertion, a pallid complexion, weariness with weakness, and spontaneous sweating. The tongue is pale, with a white coating. The pulse is depletive or hesitant and intermittent.

### 2 *Deficiency of Heart-Yang*

When heart-Yang is deficient it fails in its action of bringing warmth to the body.

**Pathology** Heart-Yang deficiency usually progresses from deficiency of heart-Qi. Because of deficiency of heart-Yang the blood channels lose their warmth and the Cold evil is able to congeal blood, causing stasis. This in turn aggravates heart-Qi deficiency. Because of the loss of the warming action of Yang, syndrome of deficiency-Cold appears.

**Clinical Manifestation** In deficiency of heart-Yang there are symptoms of heart-Qi deficiency. In addition, the typical syndrome includes the following. There are cold-aversion, cold limbs, heart pain, pallor of the complexion, and cyanosis of the lips. The tongue is pale and plump and may petechiae. The tongue coating is white and smooth. The pulse is indistinct and threadlike or hesitant and intermittent.

### ***3 Insufficiency of Heart-Blood***

If heart-blood becomes insufficient the heart loses its nourishment.

**Pathology** Several mechanisms lead to insufficiency of heart-blood. Chronic illness consumes heart-blood insidiously. Insufficiency of the spleen and the stomach leads to impaired digestion. These and massive blood loss can all lead to insufficiency of heart-blood. Insufficiency of heart-blood in turn leads to loss of nourishment for the heart and mind, and reduces the filling of the blood vessels. As a result the mind becomes agitated and the entire body suffers from inadequate nourishment.

**Clinical Manifestation** The typical syndrome of insufficiency of heart-blood includes the following: palpitation of the heart or neurasthenia, insomnia with much dreaming, forgetfulness, a pale and lusterless or sallow complexion, pale lips and tongue and a threadlike and feeble pulse.

### ***4 Deficiency of Heart-Yin***

Syndrome of heart-Yin deficiency appears when heart-Yin is too deficient to nourish the heart and when Fire arises out of Yin deficiency.

**Pathology** Heart-Yin deficiency frequently results from frustration of the passions so that Qi and Fire become trapped in the interior or chronic or Heat illnesses injuring Yin. In heart-Yin deficiency the heart loses its nourishment and Yin cannot properly restrain Yang. In consequence, endogenous Fire arises and causes restlessness and other syndrome of deficiency-Heat.

**Clinical Manifestation** The typical syndrome of heart-Yin deficiency is as follows. There are palpitation of the heart with restlessness, insomnia with much dreaming, hotness in the palms and soles, flushed cheeks, recurrent fever and night sweat. Alternately, there are aphthous sores in the mouth and on the tongue. The tongue is red and dry and the pulse is threadlike and rapid.

## 5 *Blazing of Heart-Fire*

**Pathology** Heart-Fire may blaze when the passions are suppressed and transformed into Fire, or exogenous Heat or Fire is strong, or excessive dietary spices transformed into Heat and generate Fire. Whatever its cause the heart-Fire blazes and disturbs the mind and damages the blood channels, producing symptoms of Heat in the mind, the tongue and the meridians.

**Clinical Manifestation** The typical syndrome of blazing heart-Fire is as follows. There are restlessness with insomnia, aphthous sores in the mouth, flushed face, thirst, difficult and painful urination with yellow urine, and dry constipation. In severe cases, there may be hematemesis, epistaxis or agitation with delirium. The tongue is red, with yellow coating, and the pulse is rapid.

## 6 *Blockage of Heart Meridians*

**Pathology** This condition is mostly due to the debility of senescence or chronic illnesses, so that Yang-Qi is chronically deficient. In a patient in such a state, fatigue from overexertion, exogenous Cold, stimulation by the passions or accumulation or gelling of turbid Phlegm can induce blockage of the heart meridians and channels.

Because of deficiency of Yang-Qi there is not sufficient motive force to ensure adequate blood circulation; this readily leads to blood stasis. Gelling of Yin-Cold and accumulation of turbid Phlegm induce impedance of Qi movement, causing blockage of the meridians and channels. As a result, blood does not circulate properly; and this gives rise to the symptoms of blockage of heart-meridians and channels.

**Clinical Manifestation** The major symptoms are tightness and pain in the chest. The pain tends to radiate to the shoulder and upper back or to the medial aspect of the upper arm; and it is often intermittent. In blockage of heart-blood, there is stabbing pain that is fixed in location and worse at night. Accompanying symptoms include cyanosis of the tongue, sometimes with purpura or petechiae, and a pulse that is threadlike and impeded or hesitant and intermittent. In accumulation and gelling of turbid Phlegm, there are suffocating tightness in the chest, much sputum, heaviness in the body, a greasy tongue and a slippery pulse. In gelling of Yin-Cold, pain is sudden and intense; and it tends to lessen with warmth. In addition, there are cold-aversion, cold limbs, a pale tongue with white coating and a pulse that is deep and slow or deep and tight. In obstruction of Qi movement, typical syndrome includes much distending pain and distending chest tightness, which are often triggered by emotional distress, a pale red tongue with thin white coating, and a taut pulse.

## 7 *Phlegm Clogging Heart Orifices*

The symptoms result from turbid Phlegm clouding the heart and the mind.

**Pathology** This condition mostly arises from emotional depression causing stagnation of Qi and production of Phlegm, or exogenous Dampness accumulating and transforming into Phlegm. In either case, the turbid Phlegm clogs the heart orifices and this in turn produces a variety of symptoms of an abnormal mental state.

**Clinical Manifestation** Patients with this condition often have dull mental status with clouded consciousness, emotional depression, bland affect, abnormal behavior and mumbling of incoherent speech. Some patients present with abrupt syncope with loss of consciousness, foaming at the mouth and gurgling in the throat. Others present with a dusky complexion, epigastric tightness, much sputum, clouded consciousness, a white and greasy tongue coating and a slippery pulse.

## 8 *Phlegm-Fire Disturbing Heart*

This is a condition of mixing of Phlegm and Fire and the two together disturbing the heart and the mind.

**Pathology** It is often precipitated by the passions, especially suppressed rage injuring the liver. The pent-up liver-Qi transforms into Fire, which in turn scorches the fluids and turns them into Phlegm. Fire and Phlegm together disturb the heart and induce mental disturbance.

**Clinical Manifestation** Typical syndromes in milder cases are palpitation of the heart, restlessness, insomnia with much dreaming, and easy fright. In more severe cases there may be delirium, unpredictable hysterical laughing or crying, or even manic behavior. In both circumstances additional symptoms include a dry and bitter mouth, flushed complexion, chest tightness, much sputum and dark red urine. The tongue is red, with yellow greasy coating, and the pulse is slippery and rapid.

## II Lung Illnesses

The main disturbances of the lung concern its functions of governing Qi and respiration and its defense of the superficies.

### 1 *Deficiency of Lung-Qi*

Syndrome of lung-Qi deficiency results from deficiency of lung-Qi and its inability to secure the superficies.

**Pathology** Deficiency of lung-Qi is mostly due to two circumstances: an illness of chronic cough wearing down lung-Qi, and insufficiency of the spleen and the stom-

ach with resultant inadequate digestion. When lung-Qi is deficient the thoracic Qi cannot be generated adequately, and deficiency of the thoracic Qi leads to reduced respiration, impaired dispersion and depuration functions, compromised security of the superficies against exogenous evils and general decline of the entire body's functional activities.

**Clinical Manifestation** The typical syndrome of lung-Qi deficiency is as follows. There are a weak cough, shortness of breath that is aggravated by exertion, soft voice with reluctance to speak, weariness, pale complexion, spontaneous sweating, wind-intolerance, susceptibility to exogenous illnesses, and thin and clear sputum. The tongue is pale, with white coating, and the pulse is depletive and feeble.

## ***2 Deficiency of Lung-Yin***

With deficiency of lung-Yin symptoms result from endogenous Heat arising due to Yin deficiency.

**Pathology** Three circumstances induce deficiency of lung-Yin: chronic cough, damage to lung-Yin in late stages of Heat illnesses, and injury to lung-Yin by the tuberculosis agent. When lung-Yin is deficient the lung loses its nourishment, so that deficiency-Fire arises and the lung loses its dispersion and depuration functions.

**Clinical Manifestation** In deficiency of lung-Yin the cough is unproductive of sputum or productive of scant sputum that is viscid or blood-streaked. In addition to the cough, the typical syndrome includes a dry throat with hoarse voice, flushing of the cheeks, recurrent fever with night sweat, hotness in the five centers, a red tongue with little coating, and a threadlike and rapid pulse.

## ***3 Wind-Cold Binding Lung***

This is a condition in which exogenous Wind and Cold bind the exterior and impair the lung's functions.

**Pathology** Exogenous Wind and Cold bind the superficies and induce dissociation between the superficies and defensive Qi. Lung functions also become impaired.

**Clinical Manifestation** The typical syndrome of Wind-Cold in the lung includes coughing productive of thin white sputum, clear nasal discharge, chills and mild fever without sweating, headache and body aches, a thin and white tongue coating, and a floating and tight pulse.

#### ***4 Wind-Heat Invading Lung***

**Pathology** When exogenous Wind and Heat attack the lung and the Defensive Phase, they impair the lung's dispersion and depuration functions and cause dysfunction of defensive Qi.

**Clinical Manifestation** The typical syndrome of Wind-Heat invading the lung is as follows. There are: cough productive of thick yellow sputum, a sore throat, thirst, viscid nasal drainage, and fever with mild chills. The tongue tip is red, with thin yellow coating. The pulse is floating and rapid.

#### ***5 Heat Accumulation in Lung***

**Pathology** Heat accumulation in the lung usually follows Wind-Heat invading the lung or Wind-Cold gelling in the lung and after a long time transforming into Heat. As Heat increasingly accumulates in the lung it impairs the lung's functions of dispersion and depuration.

**Clinical Manifestation** The typical syndrome of Wind-Heat in the lung includes cough and dyspnea, sputum that is yellow and viscid or foul-smelling purulent and containing blood, fever, thirst, chest pain, dry constipation and scant dark red urine. The tongue is red, with yellow coating, and the pulse is slippery and rapid.

#### ***6 Phlegm-Dampness Obstructing Lung***

**Pathology** This condition mostly results from an insufficient spleen failing in its functions of transformation and transportation. In some cases, improper diet injures the spleen so that water and Dampness accumulate, ascend to the lung and impair its functions. When Phlegm and Dampness block the lung, lung-Qi cannot disperse normally and symptoms result.

**Clinical Manifestation** In this condition coughing easily produces profuse sputum that is white. There also are chest tightness and distention, or labored breathing with gurgling. The tongue is pale, with white greasy coating. The pulse is slippery.

### **III Spleen Illnesses**

Deficiency of spleen-Qi impairs digestion and transportation of nutrients. As a result, Nutritive Qi becomes deficient and water and Dampness are retained. An insufficient spleen cannot govern blood. These are the characteristic spleen illnesses.

## ***1 Deficiency of Spleen-Qi***

**Pathology** Deficiency of spleen-Qi results mainly from improper diet, excessive brooding or fatigue, or chronic illness injuring the spleen. As spleen-Qi declines so does the spleen's function of transportation, and this in turn leads to impaired digestion. With inadequate delivery of nutrients, Qi and blood cannot be adequately generated. In severe cases, there is retention of water and accumulation of Dampness.

**Clinical Manifestation** The main symptoms of spleen-Qi deficiency are anorexia, loose feces, epigastric distention following eating, sallow complexion, lassitude with weariness, shallow respiration with reluctance to speak, and emaciation or edema. The tongue is pale, with white coating. The pulse is even but feeble.

## ***2 Deficiency of Spleen-Yang***

**Pathology** This condition is mainly due to progression from deficiency of spleen-Qi extending to spleen-Yang or to overindulgence of cold foods and drinks so that endogenous Cold develops and injures the spleen. As spleen-Yang declines it loses its ability to warm and to activate transportation and transformation. In these circumstances endogenous Cold arises and Yin-Cold becomes strong in the interior. These processes manifest as deficiency-Cold of the spleen.

**Clinical Manifestation** The main symptoms of spleen-Yang deficiency are reduced appetite, distention and vague pain in the abdomen with preference for warmth and pressure, loose feces and cold limbs with cold-aversion, or edema of the limbs. Women may have increased menses that are thin and white. The tongue is pale and plump, with white coating. The pulse is deep, threadlike and forceless.

## ***3 Sinking of Middle-Qi***

Sinking of the Qi of the middle-jiao (middle-Qi for short) is the condition in which deficient spleen-Qi is unable to rise but sinks instead.

**Pathology** Sinking of middle-Qi is mainly due to one of three following processes. Deficiency of spleen-Qi may worsen and progress. Persistent diarrhea or dysentery may injure spleen-Qi. Similarly, chronic exhaustion from physical labor also may injure spleen-Qi. The main function of spleen-Qi is to control ascent. If it is too weak to rise, then pure Qi may sink and cause ptosis or prolapse of visceral organs.

**Clinical Manifestation** The characteristic manifestation of the sinking of middle-Qi includes sagging of the epigastric abdomen that is worsened after eating, persistent diarrhea or dysentery, and prolapse of the rectum or uterus. Additional

symptoms include dizziness, blurred vision, weariness, weakness, and shortness of breath with reluctance to speak. The tongue is pale, with white coating. The pulse is feeble.

#### ***4 Spleen Not Controlling Blood***

Inability of the spleen to regulate blood circulation is due to deficiency of spleen-Qi.

**Pathology** This condition results from chronic illnesses or injury to the spleen by chronic fatigue. When spleen-Qi is deficient, the spleen cannot regulate blood circulation, so that blood extravasates instead of flowing within normal channels. This in turn leads to a variety of bleeding.

**Clinical Manifestation** The main types of bleeding are hematochezia, hematuria, subcutaneous bleeding, excessive menses and metrorrhagia. In addition to bleeding, the typical syndrome includes pallid complexion, lassitude with weakness, shortness of breath with reluctance to speak, reduced eating and loose feces, a pale tongue, and a threadlike and feeble pulse.

#### ***5 Cold-Dampness Encumbering Spleen***

Cold-Dampness encumbering the spleen refers to strong Cold and Dampness in the interior trapping spleen-Yang and incapacitating it.

**Pathology** This condition arises in two circumstances. In one, unregulated dietary overindulgence, especially of raw and cold foods, leads to endogenous Cold and Dampness. In the another, exogenous Cold and Dampness invade the interior in a patient excessively exposed to rain, immersed in water or residing in a cold and damp environment. Internal accumulation of Cold and Dampness causes trapping of spleen-Yang. Failure of spleen-Yang to circulate and act leads to retention of water and accumulation of Dampness, obstructs the movement of Qi and impairs the ascending and descending functions of the spleen and the stomach.

**Clinical Manifestation** The typical syndrome of Cold-Dampness encumbering the spleen includes: epigastric distention, stickiness in the mouth, anorexia, loose feces, nausea and heaviness in the head and the body, dusky and sallow complexion or yellow skin, a pale tongue with white greasy coating, and a soft and even pulse.

#### ***6 Dampness-Heat Lodging in Spleen***

This is the condition of Dampness and Heat lodging in the middle-jiao and blocking its activities.

**Pathology** The condition may result from exogenous Dampness and Heat invading and lodging in the middle-jiao or from endogenous Dampness and Heat arising from improper diet, especially overindulgence in sweet foods and alcohol. Dampness and Heat lodging in the middle-jiao block the activities of the spleen and the stomach or disturbs the liver and the gallbladder and steams the superficies. For the spleen and the stomach this results in dysfunction of digestion, transportation, ascent and descent. For the liver and the gallbladder this results in dysfunction of dispersion and excretion.

**Clinical Manifestation** There are two main patterns of symptoms of Dampness-Heat lodging in the spleen. In one, there are epigastric distention, nausea and anorexia, heaviness in the body and limbs, stickiness and bitter taste in the mouth, jaundice like bright orange. In the alternate pattern, there are prostrating fever, fever not relieved by sweating, foul smelling diarrhea and scant dark red urine. In both patterns, the tongue is red, with yellow greasy coating and the pulse is soft and rapid.

## IV Liver Illnesses

The main pathological changes in liver illnesses are disturbances in the functions of dispersion and storage of blood. The resulting symptoms are often those of the liver system and its meridians, the emotions, the sinews and the eyes.

### 1 *Stagnation of Liver-Qi*

**Pathology** Stagnation of liver-Qi mostly results from emotional depression or pent-up rage causing abnormality in the liver's function of dispersion. Stagnation of liver-Qi leads to impedance of Qi movement. In severe cases, it may induce gelling of Phlegm or blood stasis. It can also induce abnormal functioning of the spleen and the stomach, causing their Qi to move abnormally. Clinically, stagnation of liver-Qi is also known as "the syndrome of disharmony of the liver and the stomach."

**Clinical Manifestation** There are two typical syndromes of liver-Qi stagnation. In one, there are distending pain in the flanks or lower abdomen, vague pain, chest tightness, frequent sighing, emotional depression and blurred vision. Alternately, there may be globus hystericus or goiter in the neck. Furthermore, women may have distending pain in the breasts, dysmenorrhea or irregular menstruation.

Often, the pattern of symptoms also includes stomach distention or pain, vomiting and eructation.

## ***2 Upward Flaming of Liver-Fire***

**Pathology** This condition comes about mostly when a pent-up passion causes liver blockage, which in turn gives rise to Fire. Liver-Fire can also arise when exogenous Fire or Heat invades the liver meridians. When liver-Fire ascends abnormally along the meridians it induces symptoms of strong Fire in the head, eyes and regions along the liver meridians. Liver-Fire often moves sideways and induces the lodging of Heat in the liver and the stomach.

**Clinical Manifestation** The typical syndrome of upward flaming of liver-Fire is as follows. There are dizziness, distending headache, flushed face and eyes, dry mouth with bitter taste, impatience and irascibility, burning pains in the chest and flanks, insomnia with much dreaming, tinnitus, sudden deafness, constipation and dark urine. The tongue is red, with yellow coating. The pulse is taut and rapid. In severe cases, there may be hematemesis or epistaxis.

## ***3 Insufficiency of Liver-Blood***

**Pathology** Mainly three circumstances lead to insufficiency of liver-blood: insufficiency of the spleen and the stomach, so that digestion and absorption become inadequate; massive blood loss; and exhaustion by prolonged illness. Insufficiency of liver-blood leads to loss of nourishment of the head, eyes, tendons, channels, nails, muscles and the skin.

**Clinical Manifestation** The main symptoms of liver-blood insufficiency are dizziness or vertigo, pallid and lusterless complexion, emaciation, dry eyes with blurred vision, night blindness, numbness in the limbs, spasms of the tendons, dull nails and tremors in the hands and feet. Women have oligomenorrhea with pale menses or amenorrhea. The lips and tongue are pale, and the tongue coating white. The pulse is taut and threadlike.

## ***4 Deficiency of Liver-Yin***

In liver-Yin deficiency, liver-Yin is unable to restrain Yang, so that endogenous Heat arises and gives rise to symptoms.

**Pathology** Deficiency of liver-Yin mainly results from three circumstances. One is frustration of the passions causing blockage of liver-Qi becomes blocked, which in turn gives rise to Fire and Fire injures Yin. Another is chronic Heat illness consuming and injuring liver-Yin. The third is deficient kidney-Yin disabling the kidney from supporting the liver (the Water Element failing to nourish the Wood Element).

When liver-Yin is deficient the liver is not nourished. At the same time, Yin is unable to restrain Yang, so that endogenous Fire (deficiency-Fire) arises.

**Clinical Manifestation** The typical syndrome of liver-Yin deficiency includes dizziness, tinnitus, dry eyes with blurred vision, burning sensation in the face, hotness in the five centers, recurrent fever with night sweats, dry mouth and throat, a red and dry tongue, and a taut, threadlike and rapid pulse. Some patients have tremor of the hands and feet.

## 5 *Abnormal Rise of Liver-Yang*

**Pathology** Liver-Yang can rise abnormally when there is deficiency of liver and kidney Yin, so that Yang cannot be restrained. Also, when the passions are exceptionally strong, there may be excessive dispersion of liver-Qi and unbalanced exuberance of liver-Yang, so that liver and kidney Yin is consumed.

Characteristically this condition presents as “exuberance in the upper body and deficiency in the lower body” or “Yang advance and Yin retreat.”

**Clinical Manifestation** The typical syndrome of abnormal rise of liver-Yang is as follows. There are dizziness, tinnitus, distending pain in the head and eyes, flushed complexion with red eyes, impatience and irascibility, aching weakness in the waist and knees, heaviness in the head with lightness in the feet, insomnia with much dreaming, and forgetfulness. The tongue is red and the pulse is taut and forceful or taut and threadlike.

## 6 *Liver-Wind Stirring in Interior*

The generation of internal Wind is related to imbalance of Yin–Yang in the *zang* organs, and is especially intimately linked to abnormalities of the liver. The principal symptoms are dizziness, tetany or convulsion.

Clinically, there are four main patterns: (1) liver-Yang transforming into Wind, (2) extreme Heat generating Wind, (3) Yin deficiency giving rise to Wind, and (4) blood insufficiency generating Wind.

**Pathology** (1) Liver-Yang transforms into Wind usually when liver and kidney Yin have been chronically deficient, so that liver-Yang is unrestrained and induces liver-Wind. (2) Extreme Heat generates Wind usually when exogenous Heat is extreme and burns the liver meridians. (3) Yin deficiency gives rise to Wind usually during late stages of exogenous Heat illnesses. In these stages Yin-fluids have been severely damaged and the tendons and channels have lost nourishment. (4) Wind arises in blood insufficiency, whether massive blood loss or prolonged decline in chronic illness, usually because blood can no longer nourish the tendons.

**Clinical Manifestation** (1) Liver-Yang transforming into Wind: the main symptoms are dizziness, heaviness in the head and lightness in the feet, headache on shaking the head, stiff neck and numb limbs, tremors in the hands and feet and stammering speech. The tongue is red, and the pulse is taut and threadlike. Alternately, the patient faints suddenly, with tetany or convulsion of the hands and feet; or there are wry mouth and eye deviation and hemiplegia. (2) Extreme Heat generating Wind: the main symptoms are high fever, dulled sensorium, tetany or convulsion with opisthotonos when severe, rolling up of the eyes, and clenched jaw. The tongue is red or crimson, with yellow coating. The pulse is taut and rapid. (3) Wind arising in Yin deficiency: the main symptoms are tremors of the hands and feet accompanied by symptoms of liver-Yin deficiency. (4) Wind arising in blood insufficiency: the main symptoms are numbness of the body and limbs, spastic flexion of the joints, tremors of the hands and feet, and symptoms of liver-blood insufficiency.

## 7 *Cold Congealing Liver Meridians*

**Pathology** This condition is mainly due to invasion by exogenous Cold. When the Cold evil congeals the liver meridians Yang-Qi is thwarted, the tendons go into spasm and the movement of Qi and blood becomes impeded.

**Clinical Manifestation** The typical syndrome includes cold pain in the lower abdomen radiating into the pudenda, or painful contraction of the scrota, worsened by cold and alleviated by warmth. The tongue coating is white and smooth, and the pulse is deep and taut or slow.

## 8 *Dampness-Heat in Liver Meridians*

The syndromes of Dampness-Heat in the liver meridians are due to impairment of the dispersion function of the liver caused by Dampness and Heat gelling in the liver and gallbladder.

**Pathology** This condition mainly arises from attack by exogenous Dampness and Heat, from overindulgence in greasy and sweet foods or from disharmony between the spleen and the stomach with rise to endogenous Dampness and Heat. Gelling of Dampness and Heat in the liver meridian compromises the dispersion function of the liver and the gallbladder and the ascending and descending functions of the spleen and the stomach. These in turn compromise the digestion of foods and the distribution of essential nutrients. Clinically this is also known as “the syndrome of Dampness-Heat in the liver and the gallbladder.”

**Clinical Manifestation** There are several patterns of symptoms. In some patients there are distending pain in the flanks, anorexia, abdominal distention, a bitter taste

and nausea as though about to vomit. In others there is jaundice. In yet others there are alternating chills and fever. In males there may be burning pain and swelling of the testes. In females there may be yellow malodorous vaginal discharge with vulvar itch. In all these patterns, the tongue is red, with yellow greasy coating. The pulse is taut and rapid.

## V Kidney Illnesses

The major illnesses of the kidney are abnormalities of reproductive function, growth and development, water metabolism, and astringency and acceptance of Qi. Most illnesses of the kidney are of deficiency.

### 1 *Deficiency of Kidney-Yang*

Deficiency of kidney-Yang mainly manifests impairment of warming of the body and Qi transformation.

**Pathology** Deficiency of kidney-Yang occurs mainly in those patients who have a Yang-deficient constitution, are elderly with senescent decline of the kidney, have been chronically ill, or overindulge in sexual activity injuring kidney-Yang. When kidney-Yang is deficient, the Fire of the Vital Gate begins to die. This leads to the body losing its warmth, water losing its motive force to transform into Qi and the reproductive system losing its capacity.

**Clinical Manifestation** Patients with kidney-Yang deficiency typically present with lumbar and knee aches and weakness, cold-aversion with cold limbs, lassitude, pale or dark complexion, loose feces, and either clear polyuria with nocturia or oliguria with edema. Both the coldness and the edema are more marked in the lower limbs. In males, there is impotence with spermatorrhea. In females, the uterus is cold and infertile. The tongue is pale and plump, with white coating. The pulse is deep and threadlike.

### 2 *Deficiency of Kidney-Yin*

**Pathology** Kidney-Yin becomes deficient mostly when there is excessive sexual activity, prolonged illness or late stages of Heat illnesses damaging the kidney. When kidney-Yin is deficient the *zang-fu* organs and the body all lose their nourishment and the brain and bone marrow become inadequate. In this state endogenous Heat arises and kidney-Fire moves without restraint.

**Clinical Manifestation** The following pattern of symptoms is typically seen in deficiency of kidney-Yin: lumbar and knee aches and weakness, dizziness and tinnitus, insomnia and forgetfulness, hotness felling in the “five centers”, dry mouth and throat, recurrent fever and night sweat, and emaciation. Males may have priapism with nocturnal emission but deficiency of semen. Females may have frequent erotic dreams, oligomenorrhea, amenorrhea or metrorrhagia. The tongue is red, with little coating. The pulse is threadlike and rapid.

### ***3 Deficiency of Kidney-Essence***

**Pathology** Deficiency of kidney-essence may be due to inadequate prenatal endowment, inadequate postnatal acquisition or chronic fatigue from physical labor. It results in a diminished capacity for reproduction, premature senescence in adults or poor growth in children.

**Clinical Manifestation** There are several typical patterns. Children with inadequate prenatal endowment tend to have delayed growth, diminished mental capacity, sluggish behavior and softening and deformity of the bones. Infants also show delayed closure of the anterior fontanel as well. Adults show premature senescence, loss of hair, looseness of the teeth, mental dullness, tinnitus and deafness, forgetfulness and absent-mindedness, and paresis of the feet. Males have decreased semen and infertility. Women have amenorrhea and infertility. Both have reduced sexual capacity.

### ***4 Failure of Kidney-Qi to Solidify***

This refers to kidney-Qi that is deficient, so that is unable to solidify and astringe.

**Pathology** In adults this condition results mainly from senescent deficiency of kidney-Qi, childhood immature inadequacy of kidney-Qi, excessive sexual activity or prolonged illness injuring kidney-Qi. When kidney-Qi is unable to store and solidify, it loses control of the urinary bladder and the gate of semen emission; and the Chong and Ren Meridians become infirm.

**Clinical Manifestation** The main symptoms of failure of kidney-Qi to solidify includes weariness, tinnitus, lumbar and knee aches and weakness, and urinary symptoms. Typical urinary symptoms are polyuria of clear urine, persistent dribbling following urination, enuresis, urinary incontinence, or frequent nocturia. Some patients have fecal incontinence or persistent diarrhea. Males have spermatorrhea or premature ejaculation. Women have increased menses that are thin and clear, with persistent drip. Pregnant women may have threatened abortion. The tongue is pale, and the pulse deep and threadlike.

## 5 *Failure of Kidney to Accept Qi*

**Pathology** It may come about when the kidney is injured, usually by chronic cough so that lung insufficiency affects the kidney, inadequate prenatal endowment, premature senescent decline of the kidney, or kidney injury by chronic exhaustion from overexertion. When kidney-Qi is too weak to accept Qi, respiration becomes short and labored.

**Clinical Manifestation** This condition presents two syndromes. The respiratory syndrome manifests shortness of breath with labored breathing, longer exhalation than inhalation, and interruptions of respiration. These are aggravated by exertion. The other syndrome reveals spontaneous sweating, weariness, soft and timid voice, lumbar and knee aches and weakness, a pale tongue with white coating, and a deep and feeble pulse.

## VI *Stomach Illnesses*

The principal abnormalities in stomach illnesses are impairment of acceptance of food and drink and abnormal ascent of stomach-Qi.

### 1 *Deficiency of Stomach-Yin*

**Pathology** Deficiency of stomach-Yin usually results from one of two circumstances. In one, chronic Heat in the stomach causes stagnation of liver-Qi, which can then give rise to endogenous Fire. In the another, unbalanced indulgence in warm and dry foods damages stomach-Yin. With the loss of nourishment from stomach-Yin, stomach-Qi becomes disordered or ascends abnormally.

**Clinical Manifestation** The typical syndrome of deficiency of stomach-Yin includes dull gastric pain with regurgitation, indigestion with bloating or dry heaves, hiccup, anorexia despite hunger, dry mouth and throat, dry constipation, a red tongue with little coating, and a threadlike and rapid pulse.

### 2 *Food Retention*

**Pathology** This mainly results from overeating, binge eating or drinking, or dietary indiscretion in the presence of chronic deficiency of stomach-Qi. In either case there is indigestion leading to food retention in the stomach, hence blockage of stomach-Qi and loss of its downward transportation function.

**Clinical Manifestation** There are two main syndromes. One includes epigastric tightness and distention, sometimes epigastric pain, foul eructation, acid regurgitation, vomiting of malodorous, acid and rotten foods with relief of pain

and distention. The another includes borborygmus with diarrhea of foul and rotten feces. In both patterns, the tongue coating is thick and greasy and the pulse is slippery.

### **3 Cold in Stomach**

**Pathology** This occurs in two circumstances. In one, when the Cold evil attacks the stomach or with excessive indulgence in cold foods and drinks, Cold gels in the stomach and causes blockage. In the another, in a patient with chronic fatigue or illness stomach-Yang may become chronically deficient. If the stomach is now attacked by exogenous Cold, stomach-Yang is further injured and the stomach loses its warmth. As Yin-Cold accumulates it gels and Qi stagnates so that food is retained and Qi becomes deficient.

**Clinical Manifestation** When Cold gels in the stomach there is cold epigastric pain. In mild cases, the pain persists. In severe cases, it becomes spasmodic, and cold aggravates while warmth alleviates it. Another pattern includes weariness and weakness, cold-aversion with cold limbs, epigastric pain with preference for pressure. The pain is alleviated by food. Yet another pattern includes gurgling in the stomach and regurgitation of clear fluids. In all these patterns, the tongue is pale, with white smooth coating. The pulse is slow or taut.

### **4 Heat in Stomach**

**Pathology** Heat in the stomach may result from direct attack by exogenous Heat. It may result when passions are extreme, so that stagnant Qi transforms into Fire and attacks the stomach. It may result from eating too much food of acrid, spicy, hot or dry nature. When Fire or Heat gels in the stomach it scorches the body fluids and causes stomach-Qi to escape. This in turn leads to stagnation of the remaining Qi and blood stasis, giving rise to symptoms of blazing strength Fire.

**Clinical Manifestation** The typical syndrome includes overeating with frequent hunger, thirst with preference for cold drinks, burning gastric pain, halitosis, constipation, gingival pain and swelling or bleeding, mouth and lip ulcers, a red tongue with yellow coating, and a slippery and rapid pulse.

## **VII Gallbladder Illnesses**

The gallbladder is the exterior organ in the interior–exterior dyad of liver-gallbladder. Thus, most illnesses of the gallbladder are simultaneous illnesses with the liver. The characteristic symptom specifically of gallbladder illnesses is indecisiveness.

In addition to Dampness-Heat in the liver and the gallbladder, clinically there is the illness of Dampness gelling in the gallbladder, which results from Phlegm and Heat inducing stagnation of gallbladder-Qi.

**Pathology** This mostly results from frustration of the passions, so that the gallbladder loses its excretory function and stagnant gallbladder-Qi generates Phlegm and Fire. Internal disturbance by Phlegm and Fire makes gallbladder-Qi insecure and insecure gallbladder-Qi causes mental symptoms.

**Clinical Manifestation** The main symptoms of the gallbladder illness include agitation with restlessness, fearfulness with insomnia, timorousness with easy startling, indecisiveness, bitter taste with nausea, chest tightness with flank fullness, dizziness with blurred vision, tinnitus, yellow and greasy tongue coating, and a taut and slippery pulse.

## VIII Large Intestine Illnesses

The principal abnormalities in illnesses of the large intestine are impaired movement and disturbed defecation.

### 1 *Dampness-Heat in Large Intestine*

**Pathology** Dampness-Heat in the large intestine is mainly due to unrestrained diet, so that Dampness and Heat invade the large intestine. When the large intestine is injured by Dampness and Heat it loses its functions of downward transportation and transformation. This may result in diarrhea. If Dampness and Heat gel and persist, the intestinal meridians may be injured, leading to Qi stagnation and blood stasis. Stagnant Qi and static blood may decay and transform into blood-containing pus, and this may manifest as dysentery with red and white viscid floccules.

**Clinical Manifestation** The main symptoms include abdominal pain with abrupt diarrhea that is yellow and foul smelling. An alternate pattern includes dysentery with red and white viscid floccules, tenesmus and a burning sensation in the anus. In both patterns there are in addition dark oliguria, fever and thirst. The tongue is red, with yellow greasy coating. The pulse is rapid.

### 2 *Fluid Deficiency in Large Intestine*

**Pathology** Loss of large intestine fluids is most often due to deficiency of Yin-blood in old age, Heat illnesses consuming fluids or massive blood loss in childbirth with injury to Yin-blood. Loss of the fluids causes the large intestine to lose its nourishment, impairing its downward transportation function and causing constipation.

**Clinical Manifestation** The characteristic symptom is constipation that requires much straining and defecation that comes only once in several days. Typically, in addition there are dry mouth, halitosis and dizziness. The tongue is red with little moisture, the coating is yellow and dry and the pulse is threadlike and rapid.

### 3 *Chronic Diarrhea in Large Intestine Insufficiency*

This is a condition of deficiency of Yang-Qi of the large intestine, so that it fails its solidifying and astringing function.

**Pathology** Because of prolonged diarrhea or dysentery, which injures spleen and kidney Yang-Qi, the large intestine loses its ability to solidify and astringe. As a result the clear Qi sinks and intractable diarrhea ensues.

**Clinical Manifestation** The main symptoms are intractable diarrhea and fecal incontinence. In severe cases, there may be rectal prolapse and dull abdominal pain with preference for pressure and warmth. The tongue is pale, with white smooth coating. The pulse is deep and feeble.

## IX Small Intestine Illnesses

The most important illness specific to the small intestine is that of strong Heat in the small intestine.

**Pathology** Strong Heat in the small intestine is mostly due to Fire transformed from the passions, attack by exogenous Fire evil causing strong Heat in the small intestine, or strong heart-Fire transmitting along the meridians to the small intestine.

**Clinical Manifestation** The principal symptoms are in urinary: dark oliguria, burning dysuria or hematuria. Additional symptoms include red complexion, thirst, restlessness with insomnia, and aphthous ulcers on the lips and the tongue. The tongue tip is red or crimson and the coating is dry and yellow. The pulse is rapid.

## X Urinary Bladder Illnesses

The most important illness specific to the urinary bladder is due to gelling of Dampness and Heat in the bladder.

**Pathology** This is mostly due to attack by exogenous Dampness and Heat, but can also result from dietary indiscretion generating endogenous Dampness and Heat, which then sink into the urinary bladder. As Dampness and Heat accumulate and

gel in the bladder the transformation of bladder-Qi becomes abnormal. The bladder then presses on the urethra and affects the kidney. Urinary symptoms ensue.

**Clinical Manifestation** Typically there are urinary frequency and urgency, yet the quantity of urine is relatively small and there may be dribbling and burning pain in the urethra. The urine is yellowish red and turbid, or it may contain blood. Sometimes the urine contains sand granules or stones. There may be accompanying fever and flank pain. The tongue is red, with yellow coating. The pulse is rapid.

## Section 4 Diagnosis by Six Meridians

Diagnosis by the six Meridians is the method used in the *Treatise on Cold-Attack* to differentiate illnesses due to attack by exogenous Cold. The Six Meridians is a general term that encompasses the three Yang Meridians (Taiyang, Yangming and Shaoyang) and the three Yin Meridians (Taiyin, Shaoyin and Jueyin). It is an extension of a method in the *Plain Questions*, which Zhang Zhongjing (Eastern Han dynasty) devised specifically for exogenous Cold illnesses. Since then it has proven its usefulness.

This method uses the three Yin Meridians and the three Yang Meridians as the framework on the basis of the propensity of illnesses of Cold attack to transmit from the exterior to the interior, from the shallow to the deep. The *zang-fu* organ and its meridians belonging to each of these six meridians have their own Yin–Yang affiliation and partake of Yin–Yang each to its own degree. Consequently, when under attack by the same exogenous Cold each organ and its meridians manifest a different set of pathological changes and a different development. This was the impetus that led Zhang Zhongjing to develop this method.

The method of diagnosis by the Six Meridians assigns all illnesses of Cold attack to the three Yang and the three Yin Meridians. It establishes the standard progression of such an illness from Yang to Yin, from the exterior to the interior: Taiyang → Yangming → Shaoyang → Taiyin → Shaoyin → Jueyin. It further clarifies the understanding that in the course of an illness each stage has its own characteristics. The method also emphasizes the mutually influential relationship among these three Yang and three Yin meridians. For these reasons proper application of the method of diagnosis by the Six Meridians can help the physician to accurately identify the cause of an illness of Cold attack, its development and progression of transmission, and to guide the physician in its treatment and his choice of herbs.

### I Taiyang Meridian

The Taiyang Meridian encompasses the superficies of the body and serves as the protective fence for the other meridians. When exogenous Wind or Cold attacks the body, mostly it first attacks the Taiyang Meridian. Genuine Qi rises to do battle with

evil Qi. The struggle between genuine Qi and evil Qi in the exterior gives rise to the symptoms of Taiyang illnesses.

Taiyang illnesses are of two categories: Taiyang Meridian and Taiyang *fu*-organ.

## 1 *Taiyang Meridian*

Illnesses of the Taiyang Meridian are those in which exogenous evils attack the superficies. Because of differences in patients' constitution and in the nature and virulence of the pathogenic evils, there is the further differentiation between Wind-invasion and Cold-attack in Taiyang.

In an illness of **Wind-invasion in Taiyang** the symptoms are those of the Wind evil attacking the superficies, so that Defensive Qi and Nutritive Qi become disharmonious. The main symptoms include headache, stiff neck, fever with sweating, wind-intolerance and a floating and even pulse.

In an illness of **Cold-attack in Taiyang** exogenous Cold attacks and binds the exterior and blocks out Defensive Yang. The main symptoms include headache, stiff neck, fever with chills, no sweating but dyspnea, body aches and a floating and tight pulse.

## 2 *Taiyang Fu-Organ*

In an illness of Taiyang *fu*-organ, the exogenous pathogenic evil is not expelled but progresses along the meridian to the urinary bladder. Clinically there are two patterns: water retention and blood stasis in Taiyang.

**Water Retention in Taiyang** In this condition Heat evil in Taiyang has transmitted into the urinary bladder where it blocks bladder-Qi and causes it to stagnate. The symptoms are fever, wind-intolerance, sweating, much thirst but vomiting upon drinking, difficult urination, lower abdominal distention and a floating pulse.

**Blood Stasis in Taiyang** This results from a combination of exogenous Heat gelling and blood becoming static in the lower abdomen. The symptoms are spasms or hard distention of the lower abdomen, insane or wild behavior, normal urination and a pulse that is deep but impeded or deep but hesitant. In some patients there may be jaundice.

## II *Yangming Meridian*

An illness has entered Yangming when in its course there is strong Yang-Heat or Heat has gelled in the stomach and intestines. Yangming illnesses are of two categories: Yangming Meridian, and Yangming *fu*-organ.

The principal factor in an illness of **Yangming Meridian** is abundant Heat in the interior at a stage when the chyme has not yet been transformed into formed feces. The symptoms include high fever, profuse sweating, extreme thirst with copious drinking, restlessness with delirium, and coarse labored respiration. The tongue coating is yellow and dry and the pulse is surging and large.

In an illness of **Yangming fu-organ** Heat evil has transmitted to the interior where it struggles and intermixes with the chyme in the intestines, thus becoming one of strength Heat in the interior. The symptoms are that of daily recurrent fever, delirium, constipation, hard distention and pain about the umbilicus, and a deep and replete pulse. In severe cases, there may be fidgeting with the clothing or the bed sheet, steady staring and fearfulness with anxiety.

### III Shaoyang Meridian

In an illness of Shaoyang Meridian the exogenous pathogenic evil invades the Shaoyang Meridian and gallbladder-Qi does not move smoothly. Its main symptoms form two patterns. In one, there are bitter taste, dry throat and blurred vision. In the another, there are alternating chills and fever, fullness in the chest and flanks, a depressed mood with anorexia, dysphoria with much vomiting, and a taut pulse.

### IV Taiyin Meridian

The principal pathological mechanism of a Taiyin illness is deficiency-Cold in the spleen and the stomach. It may be due to impairment of spleen-Yang by progression of an improperly treated illness of the three Yang Meridians. It may also be due to direct invasion by exogenous Wind and Cold in a patient with chronic insufficiency of the spleen and the stomach. The pattern of symptoms includes abdominal distention with vomiting, dysphagia, diarrhea, spasmodic abdominal pain, and an even but feeble pulse.

### V Shaoyin Meridian

A Shaoyin illness is that stage in the course of exogenous diseases characterized by general weakness and depletion of Yin–Yang. Its principal symptoms are somnolence and a threadlike and indistinct pulse. The Shaoyin Meridian pertains to the heart and the kidney, and these two *zang* organs together are the root of the human body and govern the two Qi of Water and Fire. Hence there are two categories of Shaoyin illnesses: Cold transformation and Heat transformation.

The **Cold transformation** type is the more common of Shaoyin illnesses. Its principal cause is deficiency of Yang-Qi of the heart and the kidney, so that exogenous evil invades and transforms into Cold under Yin influence. The main symptoms are as follows: cold limbs, thirst with preference for hot drinks, clear polyuria, diarrhea, palpitation of the heart, lying with curled posture and somnolence, and a threadlike and indistinct pulse.

The **Heat transformation** type results from exogenous pathogenic evil transforming into Heat under Yang influence, and is an illness of deficient Yin and hyperactive Yang. Its symptoms include restlessness, insomnia, pain or sores in the throat, a red tongue tip and a threadlike and rapid pulse.

## VI Jueyin Meridian

This is the stage in the course of exogenous illnesses that are characterized by the mixed appearance of pathological changes of Cold and of Heat. It is a relatively late stage. Because the Foot-Jueyin Meridian pertains to the liver, links with the gallbladder and runs along both sides of the stomach, a Jueyin illness will frequently present as an illness of the liver, or the gallbladder and the stomach. Its main syndrome manifests as follows: diabetes, reflux of gas to the heart, burning pain in the heart, hunger without desire to eat, vomiting of ascarids following eating and intractable diarrhea.

## Section 5 Diagnosis by Four Phases

Diagnosis by the Four Phases for warm illnesses was an approach devised by the Qing dynasty physician Ye Tianshi for the analysis of warm illnesses caused mainly by exogenous Heat evil. These phases – Defensive, Qi, Nutritive and Blood – signify four stages in the course of an illness and reflect four levels of severity as the exogenous evil progresses from the exterior to the interior. Exogenous Heat evil enters by the mouth and nose and first attacks the lung. It moves progressively from the Defensive to the Qi Phase, from the Qi to the Nutritive Phase, and finally from the Nutritive to the Blood Phase. As the pathogenic evil invades more deeply the illness also becomes more severe.

In this way, the illness characteristics of these Four Phases signify the depth of Heat evil, the degree of severity of the illness and the state of its pathological changes. When the pathogenic evil is in the Defensive Phase the illness is least severe and is in the exterior. The principal organ and tissue affected are the lung and the body superficies. When the illness is in the Qi Phase it is at a somewhat deeper level and at a somewhat higher degree of severity. Here, the pathogenic evil has entered the interior and is affecting more organs and tissues – the chest and the diaphragm, the lung, the stomach, the intestines, the gallbladder or other organs.

When the pathogenic evil enters the Nutritive Phase, the location is another step deeper. The disease evil has now entered the heart and the pericardium, so that the mind is disturbed. When the illness is in the Blood Phase, Heat evil is in the liver and the kidney, in severe cases impairing and consuming blood and making the illness critical.

The following describes the basic pathology and clinical manifestations as an illness progresses through the Four Phases.

## **I Defensive Phase**

An illness is in the Defensive Phase when the Heat evil has just attacked the lung and the Defense Phase, so that defensive Qi action becomes disorganized and lung-Qi movement impeded. It is an illness of exterior-Heat (Heat in the exterior).

The typical syndrome of an illness in this Phase includes fever, mild wind and cold-aversion, sweating, a tongue that is red along the sides and in the tip, and a floating and rapid pulse. Often accompanying them are headache, thirst, coughing and sore throat.

## **II Qi Phase**

In the Qi Phase Heat evil has entered the visceral organs. Genuine Qi and evil Qi are both strong. The symptoms are those of their vigorous struggle and strong Yang-Heat. Because many visceral organs may be affected in the Qi Phase, illnesses of the Qi Phase show many patterns of symptoms. There are symptoms that are common to the patterns, however. These include fever, heat-aversion rather than cold-aversion, a red tongue with yellow coating and a rapid pulse. There may be the additional symptoms of restlessness, thirst and dark urine.

If Heat gels in the lung, there are additional symptoms such as cough, chest pain and expectoration of viscid yellow sputum.

If Heat disturbs the chest and the diaphragm, additional symptoms are dysphoria, uneasiness and restless fidgeting.

If Heat is in the lung and the stomach, additional symptoms are sweating, labored breathing, restlessness, much thirst, yellow and dry tongue coating, and a rapid pulse.

If Heat presses on the large intestine, additional symptoms are diarrhea, chest stuffiness and delirium.

## **III Nutritive Phase**

In an illness of the Nutritive Phase the Heat evil is lodged deep inside and the illness is severe. Since the meridians in the Nutritive Phase enter directly into the heart and

pericardium, the symptoms are characteristically those of injury to Nutritive-Yin and disturbance of the heart and the mind. The main syndrome shows as follows: fever worst at night, mild thirst, agitation with insomnia or mental confusion with delirium, faint skin rashes, a red or crimson tongue and a threadlike and rapid pulse.

## IV Blood Phase

An illness of the Blood Phase is at the stage where the Heat evil has entered deeply into the Blood Phase; it is the critical stage of a warm illness. The symptoms show two patterns in addition to those of the Nutritive Phase.

If Heat in the Blood Phase is strong and injures the blood vessels, the main symptom is eruption of a rash or some form of bleeding. The rash consists mostly of dark or purple macules and papules. The bleeding may be hematemesis, hematochezia, hematuria, epistaxis or hematoma in a muscle. The tongue is typically crimson.

If Heat in the Blood Phase is strong and consumes Yin-fluids, the main syndromes reveal fever with flushed face, dry mouth and tongue, tinnitus with deafness, hotness in the five centers and a depletive and rapid pulse.

## Section 6 Diagnosis by Sanjiao

Diagnosis by the sanjiao was the conception of Wu Jutong of Qing dynasty. He extended the material concerning the sanjiao in the *Internal Classic* and categorized the symptoms of exogenous warm illnesses into those of the upper-jiao, middle-jiao and lower-jiao. The principal goal of this categorization is to elucidate the development and progression of exogenous febrile illnesses and to provide a method for their differential diagnosis. In particular, it is very useful for understanding the status of the struggle between genuine Qi and evil Qi. Among the febrile illnesses it is most efficacious for analyzing those caused by Dampness and Heat.

Diagnosis by the sanjiao complements diagnosis by the Four Phases for the warm illnesses.

## I Upper-Jiao Illness

When an illness is in the upper-jiao it is usually in its early stages. The symptoms are primarily those of the head and face, the skin, the chest cavity and other parts of the exterior. They mostly reflect abnormal changes in the functional activities of two *zang* organs, the lung and the pericardium, and their meridians.

Exogenous Heat enters by means of the nose, which links to the lung. Defensive Qi guards the lung and the skin. When an upper-jiao illness begins it is manifested in the exterior by blockage of defensive Qi and in the interior by failure of lung-Qi to act.

From this initial stage there are three possible paths of progression. One path is for the pathogenic evil to transmit to the interior and transform into Heat. This can lead to two patterns of symptoms. One pattern includes fever, restlessness and irritability; these are symptoms of Heat lodging in the lung. The another pattern includes inflamed swelling in the head and face or throat, and faint red rashes in the skin; these are symptoms of Heat poison in the upper body. Another path is for the Heat evil to travel through the meridians and transmit in retrograde fashion to the pericardium. This leads to symptoms of Heat in the Nutritive Phase. The third path is transmission to the middle-jiao.

## II Middle-Jiao Illness

Here, the Heat pathogenic evil is in the middle-jiao, and the symptoms are those of illnesses in the spleen and the stomach. The symptoms are located in the epigastrium and the peri-umbilical abdomen, and reflect involvement of the spleen, the stomach, the large intestine and their meridians.

Illnesses in the middle-jiao are due to transmission from the upper-jiao or by extension from the lower-jiao. Middle-jiao symptoms often appear in the early stage of disease, but may also appear in the middle or even late stages.

Clinically, in addition to strong Heat in the Yangming Meridian or Qi Phase and Heat gelling in the *fu* organs of Yangming, the category of middle-jiao illnesses includes certain illnesses due to Dampness-Heat steaming the spleen and the stomach or the liver and the gallbladder. The typical pattern of symptoms is as follows: fever that does not break, sweating that does not relieve fever, chest tightness and stomach blockage, much nausea, heaviness in the body, a yellow and greasy tongue coating and a soft pulse. Where Dampness and Heat steam the liver and the gallbladder there may be jaundice as well.

## III Lower-Jiao Illness

Illness in the lower-jiao principally reflects abnormalities in the liver, the kidney and their meridians. It may result from direct invasion by exogenous pathogenic evil, chronic insufficiency of liver and kidney Yin-fluids, or direct transmission from the upper-jiao. Lower-jiao syndromes appear mostly in the late stages of the illness, but may appear in the middle or even early stages.

Lower-jiao illnesses are mostly ones of deficiency. Common types of syndromes include genuine Yin on the verge of total collapse, strong Fire due to Yin deficiency, and Wind stirring due to Yin deficiency.

In the late stages of exogenous Warm illnesses, following the struggle between genuine Qi and evil Qi the Yin-fluids may be too injured to assist in the elimination of the pathogenic evil. The residual evil resides in the Nutritive or Blood Phases and give rise to such symptoms as night fever which subsides by morning, absence of sweating when the fever breaks, mildly decreased appetite, emaciation, a red tongue with little coating and a deep, threadlike, intermittent but rapid pulse. These symptoms indicate that genuine Qi is deficient and evil Qi persists.

## **Guidance for Study**

### **I Aims of Study**

This chapter describes differential diagnosis in CM. It summarizes the six approaches to diagnosis – by the Eight Fundamentals, by Qi and Blood, by Visceral Organs, by the Six Meridians, by Four Phases, and by Sanjiao.

### **II Objectives of Study**

After completing this chapter the learners will:

1. Be familiar with diagnosis by means of the Eight Fundamentals;
2. Be familiar with diagnosis according to the state of Qi and blood and their inter-relationship;
3. Be familiar with diagnosis according to pathological changes of the viscera and their interrelationship;
4. Be familiar with the principles of diagnosis of febrile illnesses in accordance with the six Meridians;
5. Be familiar with the principles of diagnosis and analysis of the warm illnesses by the Four Phases – Defensive, Qi, Nutritive and Blood;
6. Be familiar with the principles of diagnosis and analysis of the warm illnesses by the Sanjiao.

## **III Exercises for Review**

1. Briefly describe the perspective, characteristics and scope of application for each of the six types of the differential diagnosis.
2. Describe the main syndromes and relevant symptoms in light of the Eight Fundamentals.

3. What are the characteristics of the exterior and interior syndromes? Compare them.
4. What are the main syndromes and relevant symptoms of the simultaneous occurrence of Cold and Heat?
5. Explain the interrelationship between the syndromes of insufficiency of the kidney-Yang, of heart-Yang and of spleen-Yang.
6. What are the symptoms of syndromes of the sinking of Qi of the Middle-Jiao? Of insufficiency of spleen-Qi? Compare them in details.
7. What are the characteristics of the syndrome of stagnation of liver-Qi?
8. Describe the pathogenesis of flaming-up of liver-Fire and stirring of liver-Wind. Describe their respective clinical manifestations.
9. What are the characteristics of Dampness-Heat in the large intestine?
10. Describe the clinical manifestations of disharmony between the spleen and the liver.
11. Explain the phenomena of “genuine Heat, false Cold” and “genuine Cold, false Heat.”
12. Give some examples that could illustrate how the theory of the Five Elements helps to explain the relationship between the illnesses of visceral organs.

# Chapter 10

## Therapeutics

### Section 1 Principles of Therapeutics

The sure basis for treatment is a firm diagnosis established by means of the four diagnostic methods, symptom analysis and differential diagnosis. Without a firm diagnosis the optimal results from treatment is not possible.

The principles and techniques of diagnostics, symptom analysis and differential analysis have been described in previous chapters. This chapter describes the principles and common methods of therapeutics in CM.

### I Early Treatment to Prevent Progression of Illness

There is a passage in the *Internal Classic* that compares the treatment of an illness to the governance of a nation. The key to governance of a nation lies in effective laws and institutions, and these laws and institutions are more effective if put in place before the occurrence of any disturbance than after. Similarly, therapeutics should emphasize prevention prior to the development of an illness (Volume 1, Part II, Chapter 11). This is not always possible; but prevention is still applicable when illness has begun. In this context, prevention includes three concepts: when illness has begun prevent complications; secure unaffected regions to prevent progression or transmission of illness; and prevent complications during convalescence.

#### 1 When Ill Prevent Complications

Though the ideal is to prevent illness from developing at all, it is not possible for every person in every situation. However, it is of practical significance to maintain an optimistic outlook as well as to diagnose and treat early, in order to prevent complications.

Illnesses manifest traceable symptoms of development and progression. Making an early diagnosis requires the physician to observe the patient carefully and search thoroughly in order to formulate a firm diagnosis. For example, an exogenous illness generally proceeds from the exterior to the interior and from the superficial to the deep. Hence, when the illness is still in the exterior the physician must seize upon the cold-intolerance, fever, body aches and other characteristic symptoms and promptly secure the exterior, so that the pathogenic evil can be dissipated from the exterior and prevented from going deeper. In the case of Wind-invasion (stroke), before the appearance of sudden syncope, wry mouth, hemiplegia and other typical symptoms, the physician must seize upon the early symptoms of dizziness, faintness and numbness of the limbs and in optimistic anticipation apply the therapeutic principle of calming the liver and extinguishing Wind. By applying this principle the physician can often prevent the illness from progressing into the meridians and viscera.

## ***2 Secure Regions Not Affected by Illness***

In accordance with the Theory of the Five Elements, because of the relationships of generation and restraint, illnesses in a visceral organ will often transmit to another visceral organ. For example, the liver belongs to the Wood Element and the spleen belongs to the Earth Element. When movement of liver-Qi is impeded the spleen and the stomach can become injured. In the early stages of impedance of liver-Qi, in addition to removing the blockage, a skilled physician will often apply herbal medicines that strengthen the spleen and the stomach to prevent their injury or insufficiency, thereby closing off the path of transmission for the liver illness. In the treatment of Heat illnesses, it is often feasible to complement sweet-cold herbs that nourish Yin with salty-cold herbs that augment Yin in order to prevent Heat from further injuring kidney-Yin even after it has already injured stomach-Yin. In the treatment of an exogenous illness, in order to prevent the illness from transmitting from the exterior to the interior it is possible by applying acupuncture to acupoints along the Foot-Yangming Meridian to facilitate the movement of Qi and blood. Doing so may prevent the exogenous evil in Taiyang from transmitting to the interior. These are examples of “securing regions not yet affected by illness.”

## ***3 During Convalescence Prevent Complications***

During convalescence, genuine Qi may not have recovered fully. Sometimes the treatment may not be sufficiently thorough in removing the pathogenic evils, allowing it to submerge in the body. If this is neglected or improperly managed, there may be recrudescence of the illness. The *Treatise on Cold-Attack* points out clearly that during convalescence from an exogenous illness the person must not

overindulge in sexual activity in order to avoid reappearance of such symptoms as weakness, fever, dyspnea, nausea or vomiting, which indicates re-injury of Qi and blood. In general, after symptoms have subsided the patient should continue to take medicines for a period of time, depending on the vigor or weakness of the constitution and the amount of residual pathogenic evil.

Sometimes, when first recovering from a Heat illness the patient may show subsidence of fever and coldness in the body. At this stage there often is residual Heat. Using a warming herbal formula or a restorative at this time may re-activate the residual Heat, much like the rekindling of fire from the ashes.

## **II In Treatment Attack the Root of Illness**

In attacking the root the physician seeks to identify the “root,” that is, the basic nature and cause of the illness and its principal abnormalities, and to devise appropriate treatment aimed at the root. This is one of the most basic of CM therapeutics. In contrast, the “appearance” is secondary. It is the response to or the result of the root.

In general, the root of an illness mostly refers to its cause, the activities of Yin–Yang and the mechanism of the illness. In complex illnesses, the root also points to a pre-existing illness or the primary illness before complications set in. The appearance refers to the symptoms, which may be urgent or not and temporary or long lasting. In complex illnesses, the appearance also refers to the secondary illness complicating a pre-existing disease or the secondary changes flowing from the primary illness. In illnesses in which the exterior and the interior are simultaneously affected CM often regards the exterior effects as appearance and the interior effects as root.

Since illnesses evolve continually, the root and the appearance are not fixed throughout an illness. Occasionally, they may even reverse their roles.

The concepts of root and appearance are quite broad. When applying the principle “in treatment attack the root” the physician must pay attention to the following two important aspects.

### ***1 Treating Root and Treating Appearance***

#### **i When Urgent Treat the Appearance**

When an acute illness develops, there may be certain symptoms that are urgent or life threatening. In such a circumstance it is appropriate to treat the urgent appearance first.

For example, when a patient is bleeding profusely the first goal must be to stop the bleeding, whatever the cause of the bleeding may be. Only when the bleeding has been substantially controlled and the vital signs stabilized should the physician

take time to ascertain the cause of the bleeding and devise treatment aimed at the cause. In some patients with abdominal distention and severe constipation or edema with oliguria, it is necessary first to promote defecation or diuresis. If the urgent symptom of constipation or oliguria is not taken care of, there will not be a path for the pathogenic evil to leave the body and any treatment of the root cannot achieve results effectively.

In certain chronic or less urgent illnesses, there may be residual illness. Often genuine Qi is deficient so that endogenous pathogenic evils cannot be repelled. In such an illness it is appropriate first to eliminate the exogenous evil to prevent further damage to genuine Qi. Also, in the early stages of an exogenous illness it is appropriate to exploit the fact that the exogenous evil may not have consolidated its position. If the exogenous evil is attacked vigorously at this stage, often the illness may be cured with half the effort. In the circumstances described paying attention to the chronic condition while ignoring the expansion of exogenous evil effects is not the best approach.

In the approach of attacking the appearance when urgent the treatment goal includes paying attention to the relationship of the root and the appearance of the illness and especially placing the patient's life at the top of priorities. Throughout treatment the physician aims to minimize the risk to the patient's life caused by the illness.

## **ii When Not Urgent Treat the Root**

This approach is applicable in most illnesses and during convalescence from an urgent illness. The goal is to eradicate the cause and pathological implications of the illness thoroughly. For example, a person with a chronically deficient constitution is highly susceptible to exogenous pathogenic agents. When such a person falls ill with an urgent exogenously caused illness it is appropriate to treat the exogenous illness first. During convalescence from this exogenous illness it is then appropriate to treat the underlying weakened constitution methodically.

In other circumstances, such as relapse of the original illness or further progression of an illness, the physician must also give treatment of the original illness an important place, so that the entire illness is treated systematically.

## **iii Simultaneous Treatment of Root and Appearance**

When the root and the appearance are equally weighty or when the root and the appearance are inextricably linked, then the appropriate and most effective approach is to treat both simultaneously.

For example, a patient presents with fever, hard abdominal distention with pain, dry constipation, a dry mouth and a dry tongue with yellow coating. This syndrome indicates that the illness is one of injury to Yin-fluids permitting accumulation and

gelling of Heat in the interior. In this case, the deficiency of Yin-fluids is the root and the Heat effects in the interior are the appearance. Since the two are equally serious, the approach to use must be to induce defecation and nourish Yin simultaneously. Only by doing so will the physician eliminate the Heat evil from the body and avoid further injury to Yin-fluids by catharsis.

There are certain exogenously caused illnesses that progress slowly but the pathogenic evils persists because genuine Qi is too weak to dispel the evils. In such illnesses it is appropriate to augment Qi (treating the root), eliminate the symptoms and secure the exterior (treating the appearance) at the same time. Doing so has the added benefit of eliminating the exogenous evil more rapidly.

The simultaneous treatment of root and appearance does not mean lacking priority or regarding both as equally important. Sometimes the emphasis is on eradicating the root without neglecting the appearance, and sometimes it is on resolving the appearance without neglecting the root. The relative emphasis is determined by the actual circumstances of the illness and the relative importance or severity of the abnormalities. Thus the application of the principle is flexible and adaptable.

## ***2 Standard Treatment and Contrary Treatment***

In the progression of an illness, its nature and manifestations are consonant under ordinary circumstances. But sometimes, when the illness is complex, the nature and manifestations may become dissonant. In such cases the syndrome may include such false symptoms of Heat along with the genuine symptoms of Cold and (pathogenic evil) strength in deficiency. In the process of deciding the approach to the treatment of any illness, it is critically important to go beyond the appearance of the illness and grasp its nature, and aim treatment at this nature. Standard treatment and contrary treatment are two principles designed specifically for these two situations.

### **i Standard Treatment**

Standard treatment is the approach of applying herbal medicines of an opposite nature to that of the illness. There are several varieties.

**If Cold Warm It** This is the principle of treating an illness of cold nature by using herbs that are warming. For example, a patient may develop endogenous Cold from an improper diet. This causes impairment of the digestive functions of the spleen and the stomach and produces such symptoms as persistent abdominal pain, watery diarrhea and cold body and limbs. It is appropriate to treat such an illness with herbs that warm the spleen and promote its transportation function. Another patient may develop an illness of exogenous Wind-Cold, with such symptoms as strong cold-intolerance, mild fever, headache and a floating and tight pulse. It is appropriate to treat this illness with acrid and warming herbs that relieve the exterior.

**If Hot Cool It** This principle applies cooling herbs to illnesses of a hot nature. For example, if Dampness and Heat evils enter the large intestine they can induce diarrhea with feces that contain pus and blood, tenesmus, fever with a dry mouth, a red tongue with a yellow coating and a rapid pulse. Such an illness should be treated with drugs that are bitter and cold to dry Dampness, clear Heat and cool blood. In an illness caused by exogenous Wind-Cold there may be mild cold-aversion, high fever, headache, a red tongue and a rapid pulse. Such an illness may be treated with acrid and cool herbs that relieve the exterior.

**If Deficient Strengthen It** This principle applies herbs that tonify or restore to treat an illness of deficiency. For example, in an illness of Qi deficiency, manifested by fatigue and weakness, soft and weak speech, shortness of breath and a soft and forceless threadlike pulse, it is appropriate to apply herbs that augment Qi. In an illness of blood insufficiency, manifested by a pallid and lusterless complexion, dizziness, blurred vision, a pale tongue and a threadlike pulse, it is appropriate to apply herbs that generate blood.

By the same principle, treat an illness of Yin deficiency by strengthening Yin, an illness of Yang deficiency by strengthening Yang, an illness of deficiency of both Yin and Yang by strengthening both Yin and Yang, and similarly for other deficiency illnesses.

This principle may be applied in conjunction with other principles. For example, in an illness of endogenous Heat in Yin deficiency the approach of cooling Heat while strengthening Yin combines this principle with the principle “if hot cool it.” In an illness of endogenous Cold due to Yang deficiency the approach of warming Yang and dispelling Cold combines this principle with the principle “if cold warm it.”

**If Strong Purge It** This approach uses methods of eliminating pathogenic evil to treat illnesses in which there is residual pathogenic evil. There are many techniques for eliminating pathogenic evil from the body, including the following: cooling Heat, dispelling Cold, dissipating Phlegm, relieving the exterior, mobilizing blood, catharsis, emesis, drying Dampness, promoting diuresis and others.

## ii Contrary Treatment

As contrasted with standard treatment, contrary treatment is the use of herbs of a nature seemingly similar to the symptoms the patient manifests. The word “seemingly” indicates that the nature of the herbs or herbal formula used in this approach is indeed the opposite of the nature of the underlying disease, so that the apparent similarity is with false symptoms. Thus, in the final analysis contrary treatment does not deviate from the principle “in treatment attack the root.”

Contrary treatment is commonly used in illnesses that are quite complex or severe. Sometimes it is used in critical illnesses when death may be imminent. There are four patterns of contrary treatment.

**Treating Apparent Heat with Herbs of Hot Nature** This circumstance is not uncommon. In certain illnesses endogenous Cold complicates a state of deficiency. During certain stages there may be strong Yin-Cold in the interior, which repels Yang to the exterior. The illness then becomes one of genuine Cold and false Heat (see Volume 1, Part II, Chapter 9, [Section 1, Subsection II, Sub-subsection 3](#)). For example, in certain illnesses in the Shaoyin Meridian (Volume 1, Part II, Chapter 9, Section 4, Subsection V) when the illness is critical there may be a syndrome of deficiency-Cold such as clear diarrhea, cold limbs and an indistinct pulse that seems to be on the verge of collapse. At the same time symptoms of hotness may suddenly appear, such as absence of cold-intolerance, feverishness with restlessness and superficial redness on parts of the face. These symptoms of hotness are false symptoms, being due to extreme deficiency of Yang in the presence of very strong Yin, so that the remnant Yang is repelled to the exterior. At this stage, the physician must absolutely avoid eliminating this false appearance of Heat, but must aim treatment at the urgent elimination of the genuine Cold. Only in this way can the physician rescue the remaining Yang-Qi from complete collapse. This is an example of treating apparent Heat with herbs of a hot nature.

**Treating Apparent Cold with Herbs of Cold Nature** This is the reverse of the circumstances of the preceding section. This principle is designed for treating illnesses in which strong Yang in the interior repels Yin to the exterior, so that there is genuine Heat and false Cold. For example, a patient has high fever, restlessness, thirst with preference for cold drinks, and dark oliguria; at the same time, there appear such symptoms as cold limbs and a deep pulse. In this case, the high fever is a genuine symptom whereas the coldness of the limbs is a false symptom. The appropriate treatment is to apply cold herbs that subdue Heat; only by doing this can the coldness in the limbs be relieved.

**Treating Apparent Obstruction with Astringent Herbs** In this approach the physician uses restorative herbs to treat an illness with apparent symptoms of blockage. It is suitable in illnesses of genuine deficiency and false strength.

In general, for illnesses with such symptoms as constipation, tightness in the chest or abdominal distention the appropriate approach is to relieve the blockage. On the other hand, in some circumstances the underlying cause of such blockage may be deficiency, because of which there is not sufficient motive force to move Qi or blood, to raise or lower, or to transport and distribute. If treatment is aimed only at removing the blockage, not only will it fail to remove the cause but it may also inflict further damage to genuine Qi. As a result, the blockage cannot be relieved. A more appropriate approach is principally to apply a restorative aimed at the underlying deficiency.

For example, in an elderly person, because of chronic insufficiency of blood and fluids Qi becomes deficient and the intestinal tract becomes dry and unable to propel chyme downward. This results in constipation. Treatment should therefore aim primarily at restoring essence, blood and fluids. Such constipation can be fundamentally resolved only by applying such an approach.

Another example is severe deficiency Cold in the spleen and the stomach leading to weakness of central Yang, hence accumulation and gelling of Yin-Cold and impedance of Qi movement. In this situation the symptoms of cold pain in the chest and abdomen, vomiting and failure of Qi to descend are joined by such symptoms as loose feces, weakness and a deep, feeble and threadlike pulse. When treating such a patient the physician must grasp the key of deficiency Cold and aim to dissipate Yin-Cold and unblock Qi in order to achieve the goal of restoration and unblocking.

**Treating Free Flow by Facilitation** This is the reverse of treating apparent obstruction with astringent medicines. In some illnesses a strong pathogenic evil accumulates and gels, leading to intractable diarrhea. It is especially important in such cases to recognize the real cause of the accumulation and gelling of the pathogenic evils and to treat these illnesses by catharsis. This is treating diarrhea with catharsis. For example, a common clinical condition is dysentery. Though the prominent symptom is persistent diarrhea with blood and pus the underlying cause is Dampness and Heat accumulating in the intestines so that the movement of Qi and blood is impeded and static blood becomes putrefied into pus. In devising treatment the physician must look beyond the free flowing of bloody and purulent diarrhea and recognize the real nature of exogenous Heat accumulating in the interior. Here, the physician must not apply astringent medicines to stop the diarrhea but must instead use the approach of cooling and purging Heat, regulating Qi, removing blockage, promoting blood circulation and removing static blood to open the intestines. Only then can the physician avoid trapping evil Qi internally and obtain a result opposite of what is desired. In the case of blood stasis in the interior leading to blood extravasating from its proper channels and producing such bleeding as metrorrhagia, treatment must also aim principally at promoting blood circulation and removing blood stasis in order to stop the bleeding. This is treating unrestrained blood flow by promoting blood flow. These are typical examples of treating free flow by facilitation.

### iii Using Corrigent in Prescription

This is also known as “using contrary treatment to complement standard treatment.” In this approach, when prescribing for standard treatment the physician adds one or two herbs that are of opposite nature to the majority of herbs in the prescription. For example, one or two cooling herbs may be added to a prescription containing mainly warming herbs, or one or two warming herbs may be added to a prescription containing mainly cooling herbs. Alternately, a warming herb is allowed to cool before administering whereas a cooling herb may be administered while hot.

The goal of complementary treatment is to avoid the possible rejection of the medicines by the body because of drastic opposition between the nature of the herb and the nature of the illness. This technique enhances the drug’s mediating ability and improves the body’s acceptance, thereby avoiding aggravating the illness by excessive stimulation. This is one of the important experiences of success of CM.

### **3 Supplemental Principles to “in Treatment Attacking the Root”**

The principle of attacking the root in treatment is one of the central principles in CM therapeutics. There are several supplemental principles surrounding it.

#### **i Support Genuine, Expel Evil**

From the perspective of the relationship between the genuine and the evil, the development, progression and resolution of an illness is the course of the struggle between genuine Qi and evil Qi. The relative rise and fall of genuine Qi and evil Qi determine the worsening or bettering of the patient. From the point of view of attacking the root, it is also important to ascertain whether the illness is a deficiency or strength syndrome and its degree of urgency. Furthermore, it is important to ascertain promptly, according to the clinical circumstances of the patient and the illness, whether to support genuine Qi or to expel evil Qi.

Theoretically there are three approaches: purely support genuine Qi; purely expel evil Qi; and both support genuine Qi and expel evil Qi. Clinically, the situation is often more complex. When genuine Qi and evil Qi are locked in battle it may not be possible to separate the purely deficient state from the purely strength state. To decide which approach to use in such a situation the physician must be flexible, with emphasis on the relative urgency of the root and the appearance. Often, at one stage it is necessary to emphasize supporting genuine Qi over expelling evil Qi in order to avoid further damage to genuine Qi by prematurely attempting to expel evil Qi. At another stage it may be necessary to emphasize the expulsion of evil Qi, in order to avoid supporting evil Qi along with supporting genuine Qi, and to wait until most of the evil Qi is gone before applying a restorative.

Occasionally the situation may be one where either support or expulsion presents problems. The only good option may be to do both at the same time in order to achieve the desired results of supporting genuine Qi without promoting the persistence of evil Qi and expelling evil Qi without further injury to genuine Qi. Even in such a situation, however, it may be appropriate to apply one more vigorously than the other. For example, in an exogenous illness contracted during a state of deficiency, if the symptoms of evil strength are stronger than the symptoms of deficiency then it is proper to emphasize acrid herbs that relieve the exterior. If the deficiency is more pronounced while the symptoms of pathogenic evils are not urgent then it is proper to emphasize herbs that restore.

#### **ii Regulate Yin–Yang**

From the perspective of the theory of Yin–Yang an illness may be regarded as a disturbance in the dynamic equilibrium of Yin–Yang, giving rise to situations of Yin or Yang excess or of Yin or Yang deficiency (see Volume 1, Part I, Chapter 6, [Section 2, Subsection II](#)). It is important to grasp the nature of the disturbance and,

starting from the relationship of mutual dependence and support, mutual opposition and restraint as well as inter-transformation of Yin and Yang, to augment the one that is deficient and restrain the one that is excessive.

An excess of Yin can impair Yang, and an excess of Yang can impair Yin. For example, in an illness of Heat complicating Yin deficiency it is important to invigorate Yin in order to restrain Yang. In an illness of Cold complicating Yang deficiency it is important to invigorate Yang in order to restrain Yin. Conversely, in an illness of interior Cold due to excess Yin it is important to subdue Yin and support Yang by applying warming herbs. In an illness of interior Heat due to excess Yang it is important to subdue Yang and support Yin by purging Heat.

Sometimes CM uses the approach of seeking Yin in Yang, seeking Yang in Yin, or treating Yin and Yang simultaneously in order to enhance the effectiveness of restoratives.

### iii Regulate Qi and Blood

Qi and blood are the most fundamental of the substances that constitute the human body. They are also the substances that are basic to the functional activities of the visceral organs, the meridians and the associated organic systems. Qi and blood influence each other. Qi is Yang; it controls blood, mobilizes blood and can generate blood. Blood is Yin; it provides the material vehicle for the movement of Qi.

The clinical aspects of Qi and blood are discussed in detail elsewhere in this book.

### iv Treat by Five Elements

In CM therapeutics, when weighing the treatment approach to apply to illnesses of the visceral organs the physician must pay close attention to the relationship between these organs in addition to regulating Qi-blood and Yin–Yang and considering root-appearance and the urgency of the illness. Only by doing this can the visceral functions be restored to normality and the regulation of Yin–Yang and Qi-blood have real clinical significance. The theoretical basis for regulating and harmonizing the *zang-fu* viscera is the theory of the Five Elements (see Volume 1, Part I, Chapter 1, [Section 2, Sub-section III](#)).

**In Deficiency Illnesses Enrich Mother** This is based on the theory that illness in a visceral organ can affect that organ's son whereas a vigorous visceral organ can nurture its son. Hence, when an organ becomes insufficient it is rational to strengthen its mother, which in turn can nurture it more effectively. However, not all mother–son relationship can be so exploited. The main patterns are the following four.

**Enrich Water to Nourish Wood** Insufficiency of kidney-Yin can lead to insufficiency of liver-Yin, which in turn permits liver-Yang to rise abnormally. If treatment aims only at strengthening the liver it cannot resolve the underlying problem. It must

reach its goal of strengthening the liver and restoring the balance of Yin–Yang in the liver by strengthening kidney–Water.

**Enrich Earth to Generate Metal** Lung–Qi has its source in the spleen and the stomach. Insufficiency of the spleen and the stomach often leads to failure to nourish and generate lung–Qi. Clinically, CM often treats deficiency of lung–Qi by strengthening the spleen and the stomach, thereby augmenting its source.

**Augment Metal and Water Simultaneously** In the distribution of fluids kidney–Yin relies upon the lung’s ability to distribute fluids. Augmenting lung–Yin can help to nourish kidney–Yin. At the same time, the kidney has the ability to receive Qi and the lung’s essence and Qi require nourishment by kidney–Yin. Thus, clinically it is common to use the approach of strengthening the lung and the kidney simultaneously.

**Augment Fire to Generate Earth** According to the theory of the Five Elements, Fire belongs to the heart. However, the whole body’s Yang–Qi derives its nourishment principally from the Fire of the kidney’s Vital Gate (see Volume 1, Part I, Chapter 3, [Section 2](#), Subsection V, Appendix). Clinically, one often sees deficiency of spleen–Yang induced by deficiency of kidney–Yang. In such an illness effective treatment requires first augmenting kidney–Yang in order to strengthen both the spleen and the kidney.

**In Strength Illnesses Purge Son** This approach is mainly applied in strength illnesses in which a illness of the son organ affects its mother organ or the son steals the mother’s Qi. By purging the strong disease evil from the son the mother organ can be made secure. “Strength” here refers to pathogenic evil strength in the son organ. The three main patterns are as follows.

**For Hyperactivity of Liver, Purge Heart–Fire** Clinically, strong liver–Fire is often induced by blazing Fire in the heart, producing the clinical condition of strong Fire in both the heart and the liver. If treatment is limited to cooling liver–Fire alone it is often ineffective. It is better to purge heart–Fire in order to assist in cooling liver–Fire.

**In Hyperactivity of Kidney, Purge the Liver** When liver–Fire blazes it can induce Fire in the kidney, which moves wildly and lead to spermatorrhea and other symptoms. Limiting treatment to purging kidney–Fire is often ineffective and risks injuring genuine Qi. It is better to purge liver–Fire in order to achieve the goal of purging kidney–Fire and conserving sperm.

**For Heart–Fire, Purge the Stomach** When exogenous Heat enters the spleen and the stomach, it may burn the pericardium and give rise to agitation, mouth and tongue ulcers and other symptoms. Purging Heat–Fire from the stomach can help to remove Fire from the heart and the pericardium, thereby calming the heart and the mind.

**Additional Approaches** By exploiting the relationship of restraint between the Five Elements it is possible to suppress a hyperactive organ in order to help its restrained organ to recover. This is most appropriate in situations where the pathological changes result from excessive restraint. Sometimes it is necessary to suppress a hyperactive organ in order to help the organ that normally restrains it. This restores the normal relationship between the Five Elements (see Volume 1, Part I, Chapter 1, [Section 2, Subsection III](#), Sub-subsections 2iii and 2iv).

**Suppress Wood to Support Earth** For example, in illnesses wherein hyperactive liver suppresses (over-restrains) the spleen and the stomach the latter organs become insufficient. The key to effective treatment is not to emphasize strengthening the spleen but suppressing the hyperactive liver. Doing so eliminates the root.

**Support Earth to Control Water** The spleen belongs to the Earth Element and the kidney to the Water Element. A commonly seen illness is that of an insufficient spleen failing to transport and water-Dampness accumulating, or deficient kidney-Yang failing to warm the spleen, so that water accumulates and gives rise to edema. In clinical practice this often manifests as water-Dampness counter-restraining the spleen (Earth Element). Hence, the application of “support Earth to control Water” generally emphasizes warming the kidney complemented by strengthening the spleen.

**Purge South to Support North** (Purge Fire to augment Water). Kidney-Yin and heart-Fire form an opposing dyad (e.g. North and South, respectively) that is normally in balance. If kidney-Yin is deficient, heart-Fire can readily blaze; in turn, blazing heart-Fire can readily consume kidney-Water. This creates a situation wherein Water is unable to restrain Fire; that is, the heart and the kidney become disharmonious. In such a situation the therapeutic approach is often to use purgation of heart-Fire as the main treatment, assisted by augmentation of kidney-Water. Clinically, such conditions as restlessness, insomnia and spermatorrhea are often treated by this method.

### III Treatment in Accordance with Person, Local and Seasonal Conditions

In the process of treating an illness, it is important for the physician to adjust appropriately to the season, the weather, geographic locale and the characteristics of the patient's body, such as its constitution, gender and age.

From the holistic point of view, the body exists in nature and is therefore subject to influence by the many elements of nature. The seasonal and the locale must influence the development, progression and resolution of illness. Moreover, differences in the body's constitution generate differences in its equilibrium of Yin–Yang and Qi and blood. The same illness will manifest and develop differently at different seasons and times, in different locales and with different bodily characteristics.

Hence, a concrete illness requires concrete analysis, with emphasis on the unique circumstances when formulating treatment.

## ***1 Adjustment to Seasonal Conditions and Timing***

The treatment approach and choice of treatment and medications for any illness must take into account the characteristics of the season and the weather, as well as the timing.

### **i Adjustment to Season and Weather**

In general, in spring and summer the weather is warm or hot and Yang-Qi is ascendant. The skin and the superficialities are accordingly in a relaxed state, and the pores are loose and open. If exogenous Wind or Cold attacks a patient, the normal treatment is to release the exterior. But in spring and summer it is important not to overuse exterior-releasing herbs that are acrid and warm, since doing so can lead to excessive dissipation and damage to Yin-Qi. In autumn and winter, as the weather changes from cool to cold, Yin is ascendant and Yang becomes weaker. The skin and the superficialities accordingly tighten up and the pores close, so that the body's Yang-Qi submerges to the interior. In such a circumstance, unless the patient suffers an illness with very high fever, it is proper to avoid herbs that are of cold or cool nature as these may injure Yang. CM has the guiding principles of "when applying cold distance from cold" and "when applying heat distance from heat."

Not adjusting to the season and weather can lead to systemic complications, since the season and weather affect the practical choice of therapeutic approach and herbs. For example, illnesses of Summer Heat are strongly seasonal and are often joined with Dampness. Thus, when treating illnesses in summer it is important to pay attention to cooling Summer Heat and dissipating Dampness. In autumn the weather tends to be very dry, so most exogenous illnesses include Dryness. When prescribing drugs it is important to avoid including too much of fragrant, warming and drying herbs and to favor acrid, cooling and moistening herbs. When prescribing herbs to relieve the exterior (see [Section 2, Subsection I](#), below) during spring or summer, in general avoid herbs with drastic exterior-releasing action such as mahuang (*Ephedra*) and favor those with mild action such as xiangru (*Elsholtzia splendens*) or fangfeng (*Saposhnikovia*).

### **ii Adjustment to Diurnal Cycle**

From the perspective of the harmony between heaven and humans the movement of the body's Qi-blood and Yin–Yang have regular rhythms, and there is a definite relationship between the abnormal changes of illness and the cycle of day-night.

When treating an illness the physician should attempt to choose the best hour to administer the drugs. Thus, on the basis of empirical observations the ancient physicians formulated a number of maxims, for example: “warm kidney-Yang in the morning and augment spleen-Qi in the evening”; “nourish kidney-Yin in the morning and strengthen spleen-Qi at noon”; and, “strengthen kidney-Qi in the morning and nourish kidney-Yin in the evening.”

Modern medical studies have confirmed the importance of this adjustment. The same medicine taken at different hours may have different effects.

Adjusting treatment to the diurnal changes of the body’s Yin–Yang sometimes has even greater clinical significance than adjusting to the season and weather.

## 2 *Adjustment to Locale*

China has a vast territory, encompassing a large variety of geographical and geological environments. As the local environments vary so do the pathogenic agents and circumstances, so that each locale has its characteristic pattern of common illnesses. The same illness occurring in different environments requires different treatment because of differences in the climate, the body’s responses to the environment and the patient’s personal habits. For example, in the northwestern region of China the climate is cold. Most illnesses are due to Cold in the exterior and Heat in the interior, so that treatment should emphasize dispelling Cold from the exterior and cooling Heat in the interior. In the southeast region the climate is warm. Yang-Qi leaks to the exterior and endogenous Cold can develop readily, so that often treatment should emphasize astringing Yang-Qi and warming the interior.

Moreover, the variation of the geographical conditions also requires using medicines differently. For example, for exogenous Wind-Cold illnesses, in the northwest, where the climate is very cold and the people habitually eat acrid and spicy foods, include in the drug larger amounts of herbs of acrid-hot nature and favor those with drastic exterior-releasing action, such as mahuang or guizhi (*Cinnamomum cassia*). In the southeast, on the other hand, the people do not tolerate acrid and spicy foods so well; hence, include in the prescription smaller amounts and favor herbs with milder action, such as jingjie (*Schizonepeta tenuifolia*) or fangfeng.

## 3 *Adjustment to Person*

This means that when considering which herbs to use in treatment it is important for the physician to consider not only the characteristics of the illness but also the patient’s characteristics, such as age, gender, underlying constitution and lifestyle.

Such personal factors must be taken into account in conjunction with the hour and locale factors. However, comparatively the personal factors are more salient

than the hour and locale factors. This is because in the causation and progression of illness the hour and local factors must act through the personal factors, so that the complex pathological effects reflect the peculiarities of the person. The value of CM lies precisely in its recognition of the commonality of the many manifestations of any one illness while emphasizing the uniqueness of each patient.

Personal factors are analyzed generally from the two perspectives of prenatal endowment and postnatal acquisition.

### **i Age**

In CM consideration of age is not limited to the dosage of medicines but extends to the unique aspects of bodily constitution and physiology as related to differences in age.

For example, in elderly patients various physiological activities decline, so that their digestive and absorptive functions are not strong and their bodies are weak and less resilient. Therefore, when prescribing laxative herbs it is wise to use two-thirds of the standard doses. On the other hand, for restorative drugs it is often necessary to use higher than usual doses because of the reduced absorptive capacity.

In small children the visceral organs are still tender and immature. Illnesses tend to progress more rapidly, since the switch between Yin and Yang or between strength and deficiency can occur rapidly. When prescribing drugs use a lower dosage and for a shorter duration, and treat promptly without delay. When prescribing restorative herbs avoid large doses in order not to overshoot the goal and end up with the opposite effect.

### **ii Gender**

The differences in physiology and personality between males and females are also a major factor in the contraction and progression of illness. Women have the unique physiologic activities of menstruation, vaginal discharge, pregnancy and delivery. These activities have a broad relationship with the liver, and women are at much greater risk for developing illnesses involving blockage of liver-Qi. Examples include emotional depression and labile emotions or hysteria, which affect mainly women. For the same reason medicines that facilitate Qi movement, dissolve static blood or regulate blood are more commonly prescribed for women. During pregnancy or menstruation, use certain herbs with caution, such as cathartics or those that mobilize blood flow. In addition, certain herbs are contraindicated during pregnancy, especially early pregnancy, because they are abortifacients or because they can injure the embryo or fetus.

### iii Factors of Social Circumstances

Since humans live in society the social circumstances affects them constantly. Such effects may be expressed at both physiological and pathological levels. In a stable environment human life is regular and both the body and the mind can readily remain healthy; in the converse, illnesses can occur easily. In a time of peace, the people are secure, content, well fed and warm. The main illnesses are those of excessive changes or overindulgence in sexual activity. In wartime and during social upheavals, illnesses of physical exhaustion and illnesses of the spleen and the stomach due to irregular diet are common. Also, when people abruptly switch from one circumstance to a drastically different one the emotions often change. The effects of such emotional changes must not be neglected.

### iv Bodily Constitution

Since patients differ in overall size, degree of thinness or fatness, robustness, and propensity to warmth or coldness, when choosing a treatment approach the physician must first determine the ampleness or deficiency of blood and the purity of Qi.

The ancient physicians categorized persons by constitution as follows: those of high Yin, those of low Yin, those of high Yang, those of low Yang, and those of balanced Yin–Yang. CM posits that these five different constitutions predispose to different responses to the same pathogenic evil and affect the course of the illness. Thus, a person of high Yang is at more risk for the generation of endogenous Heat or Fire, and a person of high Yin is at more risk for the generation of endogenous Cold. A stout person is more prone to illnesses of strength, and a weak person is more prone to illnesses of deficiency.

Differences in the body's constitution also affect the body's tolerance of medicines. A renowned CM physician has provided the following summary observation:

In a person with a pale complexion and Yang deficiency obesity is associated with increased Phlegm and Dampness. If such a person contracts exogenous Cold-Dampness the illness will not respond unless the physician prescribes herbal formula containing such herbs as ganjiang (*Zingiber officinale*), fuzi (*Aconitum carmichaeli*), renshen (*Panax ginseng*), or fuling (*Poria cocos*). If such a person contracts exogenous Dampness-Heat then the Dampness is likely to become viscid and difficult to eliminate. Effective treatment must work through Yang-Qi in order to eliminate Dampness. Excessive use of cooling herbs will congeal Dampness and trap Yang even more tightly.

In a person with a dark complexion and Yin deficiency thinness of the body is associated with a propensity to generate endogenous Fire, so that Dampness easily transforms into Heat and can damage the body fluids. The approach to treatment required is opposite of that for Yang deficiency.

Those who have a thick stomach, dark complexion or large bones, or are obese, are more resistant to poisons.

Those who are thin or have a thin stomach are less resistant to poisons.

It must be pointed out that adjustment to the person includes the patient's past illnesses. The reason is that these past illnesses often interact with the body's constitution and therefore affect the choice of prescriptions and herbs. For example, a patient with a tendency to bleed often has instability of Yin-blood. Since blood and sweat have the same source it is crucial not to overuse the method of diaphoresis (see below) in such a patient to avoid further damage to blood. Similarly, in treating an illness of Cold-attack the physician must consider the patient's past illnesses as well, rather than limiting consideration to the relative rise and fall of Yin–Yang and selecting treatment simplistically.

## Section 2 Common Therapeutic Methods

### I Commonly-Used Eight Principle Methods

Traditional methods of treatment in CM fall into eight categories, which are together referred to as the “Eight (Therapeutic) Methods.” They are diaphoresis, emesis, catharsis, mediation, warming, cooling, dissipation and restoration.

#### 1 *Diaphoresis (Exterior-Release)*

As a method of treatment diaphoresis induces the pores in the skin and the superficies to open and to produce sweat. This promotes the dispersion of the exogenous pathogenic evil from the exterior of the body.

##### i Applications

**Release of Exterior** The exterior of the body can be cleared from pathogenic evil by means of sweating. Since illnesses of the exterior may be of Cold or of Heat nature, there are correspondingly two main types of diaphoresis. Acrid-warming diaphoresis uses exterior-relieving herbs that are acrid in flavor and warm in nature; it is suitable for treating Wind-Cold in the exterior. Acrid-cooling diaphoresis uses exterior-relieving herbs that are acrid in flavor but cool or cold in nature; it is suitable for treating Wind-Heat in the exterior.

**Induction of Eruption** In certain illnesses with associated rash, when the rash erupts the illness is normally on the way to recovery. Used at the appropriate moment diaphoresis can induce eruption of the rash and with it dispersion of the poison of the pathogenic evils. An example is measles, just before appearance of the rash or when the rash is not yet fully erupted. In such illnesses the acid and cool herbs in nature must be used while the acid and warm herbs should be avoided.

**Dispelling Dampness** In appropriate circumstances the method of diaphoresis has the capacity to disperse exogenous Wind and Dampness. Hence, it may be applicable in illnesses of exogenous Wind-Cold-Dampness and in rheumatism due to Wind-Dampness.

**Reduction of Swelling** In illnesses in which there is water retention and symptoms of the exterior diaphoresis may be effective in expelling the unwanted water and in facilitating lung function.

## ii Comments, Cautions and Precautions

Sweat is a part of body fluids. Too much sweating may exhaust body fluids. Therefore, diaphoresis must never be used inappropriately. Great care must be taken especially in conditions of reduced Yin-fluid. These include the following: severe vomiting, severe diarrhea, open skin sores and massive blood loss. When applying diaphoresis, stop as soon as the disease evil has been dispersed. Excessive use of diaphoresis can easily damage Yin and wear down Yang.

Diaphoresis should be adjusted in accordance with different persons, local and seasonal conditions. In the hot weather of summer the induced sweating should be light. In the cold weather of winter it may be heavy. In the northwest where the climate is severe and cold the dosage may be increased. In the southeast where the climate is mild and warm the dosage should be reduced. In a person with a weak constitution induced sweating should be gentle. In a stout person it may be more vigorous.

If the symptoms of the exterior are accompanied by other symptoms, apply diaphoresis in conjunction with other treatment methods. For example, if there is also Qi blockage include herbs to regulate Qi as well as to release the exterior. If there is Phlegm–Rheum accumulation include medicines to dissipate Phlegm–Rheum. If there is Qi deficiency include herbs to augment Qi. If there is Yang deficiency include herbs to strengthen Yang. If there is blood stasis include herbs that generate blood. If there is Yin deficiency include medicines that nourish Yin.

Diaphoresis is not applicable when the pathogenic factors have invaded the interior of the body and the exterior symptoms have disappeared. It is contraindicated for patients who suffer from heart failure or debility.

## 2 *Emesis*

As a treatment method emesis aims to expel Phlegm, viscid mucus, undigested food or injurious substances from the throat or stomach by means of vomiting. It is an emergency procedure that is very effective when used appropriately. However, it is quite damaging to genuine Qi. Other methods of treatment should be attempted first and emesis should be used only when there is no better alternative or when the situation is urgent.

Emesis as treatment method is contraindicated in the following conditions: critical illnesses, especially in the aged, the weak, and in those with markedly deficient Qi; massive blood loss; asthma; beriberi; and pregnancy or the immediately post-partum state.

In general, emesis should be used only once, not repeatedly.

When emesis is used advise the patient to avoid all solid foods, but to use clear soups or gruel for nutrition. Also, advise the patients to avoid strong passions, to abstain from sexual activity and to avoid exposure to Wind or Cold.

### 3 *Catharsis (Purgation)*

Catharsis is the application of laxative or purgative herbs to promote defecation in order to rid the body of dry feces, undigested foods, accumulated water or Phlegm–Rheum, static blood, or exogenous Heat evil.

#### i Applications

Catharsis is applied mainly in illnesses caused by exogenous pathogenic evils in the interior. There are four main types.

**Cooling Catharsis** Cooling catharsis uses purgative or laxative herbs that are of cool or cold nature. It is a method designed to eliminate accumulated Heat from the interior, and is especially effective in promoting defecation of very dry feces. It is also applicable in the early stages of dysentery due to Heat-Dampness and to food or drug poisoning.

**Warming Catharsis** This method uses purgative or laxative herbs that are of warm nature. It is designed for eliminating accumulated Cold evil from the visceral organs. The warming herbs aid blood circulation, intestinal mobility and digestion.

**Moistening Catharsis** This is particularly suitable for constipation due to fluid damage by strong Heat, fluid insufficiency during convalescence from another illness or chronic fluid insufficiency from old age. It is also useful for constipation due to post-partum blood insufficiency.

**Fluid-Mobilizing Catharsis** This method combines promotion of defecation with mobilization of fluids for excretion. It is designed for such conditions as water or Rheum accumulation in the thorax, extensive edema and ascites.

#### ii Comments, Cautions and Precautions

Catharsis is contraindicated in the following: illnesses of the exterior or that are half-exterior and half-interior; illnesses of the Yangming Meridian (Volume 1, Part II, Chapter 9, Section 4); and women during pregnancy or menstruation.

In elderly patients with dry constipation due to chronic fluid insufficiency or in patients with chronically weak constitution and deficiency Yang-Qi, it should be used with great caution, with proper attention to the associated problems.

Purgation is a drastic method of treatment. Though valuable because its effects are prompt it can easily damage body fluids. It must therefore not be continued beyond achieving its desired effects, even if the prescription is not used up. Hence, the *Plain Questions* admonished: "Large accumulations or retention may be attacked, but stop as soon as they are half eliminated."

## 4 *Mediation (Harmonization)*

### i Applications

**Regulate Shaoyang** This method is designed to regulate the Shaoyang Meridian, where the pathogenic evil is half in the exterior and half in the interior.

**Mediate Liver and Spleen** When the liver and the spleen functions become dissociated or disharmonious, with resulting emotional suppression, chest tightness, flank and abdominal pain and diarrhea, mediation is quite effective in restoring normal functional balance.

**Mediate Stomach and Intestines** Mediation is effective in resolving disharmony in the functions of the stomach and the intestines, which results in a mixed syndrome that includes symptoms of hotness and cold, abdominal distention, nausea or vomiting, abdominal pain or borborygmus, or diarrhea.

### ii Comments, Cautions and Precautions

When the illness is in the exterior and has not entered Shaoyang, or when it has already left the exterior and has entered the interior, or if it is one of deficiency Cold, then do not apply mediation.

In illnesses of the Shaoyang Meridian in which either the exterior symptoms or the interior symptoms are more prominent, mediation should be modified accordingly. Similarly, it should be modified if there is more hotness than cold or more cold than hotness.

## 5 *Cooling (Heat-Clearing)*

The cooling method applies cool or cold herbs to clear Heat or Fire from the body.

## i Applications

**Heat in Qi Level** The cooling method is suitable when the pathogenic evil has entered the Qi Level (Volume 1, Part II, Chapter 9, Section 5) so that Heat in the interior is becoming stronger.

**Heat in Nutritive or Blood Level** Cooling is suitable when Heat has entered the Nutritive Level or the Blood Level of the warm illnesses.

**Heat Poisoning** Cooling is suitable when strong Heat has caused poisoning, as in pestilential diseases or accumulation of Heat or Fire in internal abscesses.

**Heat in Visceral Organs** When the Heat evil mainly affects a specific internal organ or induces hyperactivity of an organ, this method is quite effective.

## ii Comments, Cautions and Precautions

Before applying the cooling method be very sure that the illness is one of genuine Heat. The method is contraindicated in illnesses of genuine Cold, false Heat or when the Fire of the Vital Gate is suppressed.

In a febrile illness in which the pathogenic evil has not left the exterior and Yang-Qi is blocked, the cooling method is contraindicated. If the patient has chronic deficiency and the underlying problem is Cold in the visceral organs, cooling is contraindicated. In an illness of endogenous Heat arising in Qi deficiency, it may be used only with great caution.

Most cooling herbs are of cold or cool nature. They can impair the functions of the spleen and the stomach if overused. Thus, stop these herbs as soon as the desired effect is attained.

Since Heat always injures Yin and often wears down Qi, it is often wise to combine the cooling method with others that nourish Yin and augment Qi.

Most cooling herbs are also drying. Excessive use can further injure Yin. In illnesses of Heat, if there is also Dampness then combine cooling herbs with those that induce diuresis. If there is constipation as well, combine cooling with catharsis.

# 6 Warming

Warming is the method designed to dispel the Cold evil and to augment Yang-Qi. Its principal goals are to rescue Yang, and to warm the middle-*jiao* and dispel Cold.

## i Applications

**Warm Middle-*Jiao* and Dispel Cold** This method is suitable for treating patients who suffer from direct visceral invasion by exogenous Cold or from endogenous

Cold arising in Yang deficiency. In either situation there is insufficiency of spleen and stomach Yang, hence failure to warm the visceral organs.

**Warm Meridians and Dispel Cold** The warming method is indicated for patients whose meridians are impeded by the gelling of the Cold evil, which causes impedance of blood circulation.

**Rescue Yang and Reverse Collapse** Emergency application of the warming method is required when an illness progresses to the point of depletion of Yang-Qi, so that Yin-Cold fills the interior.

## ii Comments, Cautions and Precautions

The warming method is contraindicated in the following situation. When Heat submerges in the interior and overwhelms Yin, Yin is repelled to the exterior—that is, genuine Heat and false Cold (Volume 1, Part II, Chapter 9, [Section 1](#), [Subsection II](#)). The interior-Heat further causes such symptoms as hematemesis, hematuria, hematochezia, as well as severe symptoms of Yin-fluid depletion.

Some warming herbs have strong action and are drying. Too Much warming certainly can dispel Cold but it also consumes blood and fluids, producing dry fever. Hence, when treating illnesses of Cold unless Yang is near total depletion or requires rescue the physician must avoid using strong warming herbs in large doses.

If Cold attacks in the absence of deficiency then it is appropriate to use warming herbs focused on Cold. But if there is deficiency as well it is better to apply a sweet-warming method, since the herbs of sweet flavor have restorative action.

## 7 Dissipation (*Reduction, Elimination*)

Dissipation is the method for removing accumulations. It is a slow method, and is especially efficacious for chronic illnesses.

### i Applications

**Eliminate Retained Food** The dissipative method is effective in removing retained food, which cause such symptoms as fullness in the chest and diaphragm, eructation and acid reflux, abdominal distention or diarrhea.

**Reduce Stones** Dissipation is suitable for reducing stones in the gallbladder or the urinary tract.

**Dissolve Masses** In this application the method of dissipation uses herbs that dissolve Phlegm and soften hard masses. It is suitable in treating a variety of tumors, including those in the visceral organs, the uterus and the neck.

**Mobilize Water** This means the dispersion of Dampness or reduction of edema by promoting diuresis. There are several applications. In one, there is painful micturition, most often caused by inflammation or stones, and often accompanied by urgency yet hesitancy, frequent urination, and pus or blood in the urine. In another, there is edema or ascites. The third group includes illnesses of Dampness-Heat requiring cooling and diuresis. The fourth group includes illnesses of Cold-Dampness requiring warming and diuresis.

## ii Comments, Cautions and Precautions

Dissipation is slower and less drastic than catharsis, but is also a method that attacks the cause directly. It is therefore important to ascertain the syndromes of deficiency-strength so as to avoid its erroneous application.

In food retention due to spleen insufficiency apply strengthening of the spleen at the same time as dissipation.

In edema due to disturbed digestion, the weakened Earth Element (spleen) is unable to control the Water Element (kidney). Unless the spleen is strengthened removal of the retained water will be difficult.

In edema due to kidney insufficiency the underlying abnormality is severe insufficiency of genuine Yang. Unless the kidney is warmed and kidney-Yang augmented reduction of the edema will be difficult.

Dissipation should be applied cautiously in a patient with insufficient Yin-fluid.

## 8 *Restoration (Tonification)*

Restoration is the method whereby deficient Yin or Yang is augmented, or an insufficient visceral organ is strengthened.

### i Applications

**Qi Augmentation** This applies to all cases of Qi deficiency, more particularly to deficiency of lung-Qi or spleen-Qi.

**Blood Replenishment** The restorative method is effective in cases of blood insufficiency.

**Yin or Yang Nourishment** Here, Yin deficiency includes such conditions as insufficiency of blood or fluids, and Yang deficiency includes such conditions as endogenous Cold arising in deficiency of kidney-Yang or spleen-Yang.

## ii Comments, Cautions and Precautions

Restoration is contraindicated in illnesses caused by the strength pathogenic evil but with false symptoms of deficiency.

Qi augmentation and blood replenishment cannot be completely separated since Qi is the commander of blood and blood is the carrier of Qi. Replenishing blood also augments Qi. Indeed, in massive blood loss Qi may become deficient as well, so that Qi must be augmented in addition to rapid blood replenishment in order to avoid collapse.

Nourishment of Yin and of Yang also cannot be completely separated. Bear in mind Zhang Jingyue's dictum: "A physician skilled in nourishing Yang seeks Yang within Yin. A physician skilled in nourishing Yin seeks Yin within Yang." Moreover, endogenous Cold is common in Yang deficiency, so restoration must emphasize restorative herbs that are sweet and warm and avoid those that are cool and moistening. Similarly, endogenous Heat is common due to Yin deficiency, and restoration must emphasize sweet and cooling herbs and avoid acrid and drying herbs.

In visceral organ insufficiency the exact formulation of the prescription must be based on precise diagnosis. Among the *zang* organs, the main attention should be directed to the spleen and the kidney. Patients suffering from disturbances of digestion must have their spleen and stomach functions regulated, either prior to or together with restoration.

Patients with chronic deficiency and weak constitution must not rely solely on restoratives, but must engage in regular physical activity and adjust their diet.

## II Other Methods of Treatment

### 1 Qi Regulation

This method is designed to correct abnormalities of Qi regulation in order to restore Qi movement in the body.

#### i Applications

**Promote Qi Flow** This is mainly applied to mobilize liver-Qi that has become stagnant. It is also useful in stagnation of spleen-Qi or lung-Qi.

**Lower Qi** In some illnesses lung-Qi or stomach-Qi ascends abnormally, causing such symptoms as hiccup, labored breathing and mental disturbances in one case and vomiting in the other. By this treatment method this abnormal ascent of Qi can be suppressed.

**Raise Qi** This is applied mainly in illnesses in which spleen-Qi fails to ascend. It is often used in conjunction with strengthening of the spleen.

## ii Comments, Cautions and Precautions

Before applying this treatment method, ensure that the diagnosis is correct. If it is used when the proper treatment is to augment Qi, it may cause further Qi deficiency. Conversely, if Qi augmentation is applied when the proper treatment is Qi mobilization, Qi stagnation may be aggravated.

Qi-regulating herbs tend to be fragrant, drying, bitter and warm. If Qi stagnation is accompanied by insufficiency of Yin-fluid, exercise great care. Better yet, employ Qi-regulating herbs that do not injure Yin.

## 2 *Blood Regulation*

This method of treatment is intended for resolving blood stasis and correcting abnormal blood flow.

### i Applications

**Mobilize Blood** This is the method's basic application, and is suitable for any condition in which blood flow is impeded or static or the meridians are obstructed.

**Stop Bleeding** In CM bleeding occurs when circulation is so disturbed that blood flows abnormally out of its normal channels. This method is applicable to such conditions as hemoptysis, epistaxis, hematemesis, hematochezia and hematuria.

## ii Comments, Cautions and Precautions

If Qi is impeded blood becomes static. When Qi moves blood flows. Thus, when treating blood stasis or impedance it is wise to combine blood mobilization with Qi regulation.

When blood is warmed it circulates more vigorously. When blood is cooled its circulation becomes sluggish. Use the method of blood regulation with warming of the meridians to enhance its ability to mobilize blood and remove blood stasis.

Mobilization of blood and removal of stasis should be avoided during pregnancy.

Bleeding may be due to Heat causing blood to flow wildly or to Qi being unable to control blood. In the former the appropriate treatment is to cool blood to stop the wild flow. In the latter the appropriate treatment is to augment Qi to enhance its command of blood.

When treating bleeding it is important not to leave residual static blood to cause further impedance. Except for sudden massive blood loss, when stopping the bleeding is the first and urgent priority, the treatment to stop bleeding

should in general use some herbs that mobilize blood and dissolve static blood. This is more effective in stopping bleeding without leaving behind any static blood.

### 3 *Astringency (Consolidation)*

This method uses astringency, consolidation or pulling back to stop improper seepage or leakage.

#### i Applications

**Perspiration** This method astringes the exterior and stops sweating. It is designed for an insecure exterior with excessive sweating, and is effective in both spontaneous sweating and night sweating.

**Diarrhea** This method is most suitable for treating chronic diarrhea with incontinence due to deficiency of spleen-Yang and kidney-Yang.

**Spermatorrhea and Urinary Incontinence** Astringency is an effective treatment for deficiency of kidney-Qi, which causes spermatorrhea or premature ejaculation, or urinary incontinence or polyuria.

#### ii Comments, Cautions and Precautions

This method is designed for failure to hold back due to deficiency of genuine Qi. It is not suitable for sweating in illnesses of Heat, for the early stages of the dysentery caused by exogenous agents, for diarrhea caused by improper diet, or for spermatorrhea due to other causes.

This is not a method to treat the root, so it is important to continue searching for the cause of the illness. For example, in spontaneous sweating due to Yang deficiency the proper approach to treatment is to augment Qi while astringing the sweating. In night sweating due to Yin deficiency the proper approach to treatment is to nourish Yin while astringing the sweating.

### 4 *Orifice-Opening (Resuscitation)*

This method is designed to stimulate and clear the mind by opening orifices that have been closed abnormally.

### **i Applications**

**Cool Opening** This is intended for treating all cases of closure of orifices by Heat, which is mostly due to exogenous Heat entering the pericardium.

**Warm Opening** This is a method for using warmth to enhance Qi activity, open the orifices, avoid poisoning and dissolve Phlegm. It is principally used in sudden syncope, with tightened jaws and clouded mind, caused by Wind invasion, blockage of Yin and Qi, and blockage by Phlegm.

### **ii Comments, Cautions and Precautions**

The orifice-opening method is mainly applied to illnesses of closure due to strong disease evil causing depression of mental function. In clinical application it should be combined with treatment aimed at the associated pathological processes, such as cooling Heat, facilitating defecation, cooling the liver, suppressing Wind, dissolving Phlegm and avoiding poisoning.

Orifice-opening herbs are mostly in the form of prepared pills or powders, so that they are available for immediate use. Some are also available in fluid form for injection, for even faster effect. All orifice-opening herbs that are fragrant and have the ability to disperse. They are taken by mouth, applied to the nasal mucous membrane or injected. They are generally not heated or decocted.

## **5 Anticonvulsant Therapy (Wind Suppression)**

Anticonvulsant therapy works through calming of the liver, extinction of Wind, or expulsion of Wind to open the meridians in order to relieve the four limbs from spasms or tetany, dizziness, convulsion or wry mouth and wry eyes.

### **i Applications**

**Heat-Cooling Wind Suppression** This is most appropriate for treating endogenous Wind arising from very strong Heat, manifested by high fever, clouded mind and tetany in the limbs or convulsion.

**Liver-Calming Wind Suppression** This is most appropriate for treating internal movement of liver-Wind due to abnormal ascent of liver-Yang, manifested as dizziness with blurred vision, or sudden syncope, wry mouth and eyes, or hemiplegia.

**Blood-Generating Wind Suppression** This is most appropriate for treating tremors of the fingers or spasms of the sinews due to Yin injury by exogenous Heat so that the insufficient blood cannot nourish the sinews and deficient Yang cannot submerge to the interior.

**Wind Expulsion to Release Tetany** This is most appropriate for treating tetany with wry mouth and eyes due to Wind and Phlegm blocking the meridians.

## ii Comments, Cautions and Precautions

Wind may be exogenous or endogenous. Exogenous Wind should be dispersed; and the method of Wind expulsion to release tetany is aimed at exogenous Wind. Endogenous Wind should be suppressed; and the methods of Heat-cooling Wind suppression, liver-calming Wind suppression and blood-generating Wind suppression are all aimed at treating endogenous Wind. However, under certain circumstances exogenous Wind can induce endogenous Wind and endogenous Wind can become mixed with exogenous Wind. In clinical practice, it is wise to attend to both and where appropriate to treat both.

Wind-expelling herbs are mostly warming and drying. Great care must be exercised in their use for patients with fluid insufficiency, Yin deficiency or excessive Yang with fever.

## III Combinations of Methods

In clinical practice the methods of treatment described in this chapter are often applied singly. However, many diseases are complex and cannot be effectively treated with a single method. Even fairly simple illnesses may progress through several stages, with each stage more effectively treated by one method than by another. Hence, it is usually necessary for two or more methods of treatment to be used in concert. The following four are clinically the most useful. Other combinations include the following: cooling and orifice opening; orifice opening and anticonvulsant therapy; and warming and astringency.

### 1 *Diaphoresis and Catharsis*

In a combined exterior and interior illness (not half-exterior, half-interior) if the exterior and the interior symptoms are both urgent, diaphoresis and catharsis may need to be used together. This is also known as “double dispersion of the exterior and the interior.”

### 2 *Cooling and Warming*

When an illness has symptoms of both Heat and Cold, using cooling or warming alone may cause further imbalance and complication. Cooling and warming must be used in concert. Such illnesses are common in clinical practice.

### **3 *Attack and Restoration***

In a patient with a weak constitution, an injury by an exogenous pathogenic evil or unresolved illness by an endogenous agent can create a situation of strength of evil Qi and deficiency of genuine Qi. Application of a treatment method of attack (diaphoresis, catharsis, or emesis) by itself may leave genuine Qi still weak, and application of restoration by itself may permit pathogenic evil to persist and even to consolidate. Simultaneous application of attack and restoration may be the only correct way, so long as each is applied to the correct degree.

### **4 *Dissipation and Restoration***

The rationale for this combination is the same as that for simultaneous attack and restoration, except that here the pathogenic evil is slow acting and chronic (for example, Phlegm) or the patient may not be strong enough to withstand a method of vigorous attack.

## **Guidance for Study**

### **I Aim of Study**

This chapter describes the principles and main methods of treatment in CM. It focuses on providing the learners an understanding necessary for proper and intelligent application of CM therapeutics in clinical practice.

### **II Objectives of Study**

After completing this chapter the learners will:

1. Master the main contents of the principles of treatment;
2. Be familiar with the main treatment methods.

## **III Exercises for Review**

1. Discuss the importance of attacking the root in treatment of illnesses.
2. Define “contrary treatment” and give examples of clinical circumstances when it is appropriate.

3. Explain the relationship of “the root” and “the appearance.”
4. How would you apply the principle of supporting genuine Qi and expelling evil Qi?
5. Discuss the applications and precautions in the application of the method of diaphoresis. At which stage of an exogenous illness is it usually applied?
6. Discuss the applications of the method of catharsis, and describe the precautions in its use.
7. Describe the specific clinical applications of the method of mediation.
8. Which methods can be used to treat constipation due to insufficiency of fluids in the intestines and deficiency of Yin and blood?
9. Which therapeutic method is applicable to illnesses caused by Qi stagnation and blood stasis?
10. Give examples to illustrate the clinical applications of the method of warming.
11. Give examples to illustrate the clinical applications of the method of restoration.
12. Give examples to illustrate how the Theory of the Five Elements is used to select the therapeutic method to apply. Discuss specifically the following: enriching Water to nourish Wood; mutual promotion between Metal and Water; and suppressing Wood to support Earth.

# Chapter 11

## Health Preservation

### Section 1 Principles of Health Preservation

Health preservation is the branch of CM concerned with maintaining health, preventing illnesses and extending life span. Developed over many centuries, it has been playing an important role in conserving the health of the Chinese population over the world, and its principles continue to guide modern CM physicians.

#### I Conforming to Nature

CM holds that humans are one with heaven and earth and the natural environment. It applies the cosmic laws of Qi transformation and the waxing and waning of Yin–Yang to the human body to understand and explain the physiological functions and pathological changes of the body. More specifically, it recognizes the influence of the changes of day and night and of geographical surroundings on the body.

In line with this idea, CM teaches that humans can achieve the goal of maintaining good health and avoiding disease only when they understand and respond appropriately to the change of the seasons, the many kinds of weather and the myriad features of the different natural environments. With this understanding he can adapt to such changes, minimize their impact on health, maintain the equilibrium of the internal milieu and maximize the body's capacity to ward off attacks by pathogenic evils. Throughout the year the seasons change, Yin and Yang rise and fall and heat and cold replace each other. All these changes can directly affect the body's physiological functions.

For example, in spring Yang-Qi rises and can easily induce recrudescence of latent disease or induce liver-Wind or liver-Yang to ascend abnormally. In summer there is much rainfall and the weather is hot and humid. Under the evaporative pressure of Yang-Qi both Dampness and Heat can easily invade the spleen and the stomach as well as the superficies. The dominant feature of autumn is Dryness and Dryness can easily injure the lung. Winter is when Yin-Qi reaches its zenith and the vitality of all living things reaches its nadir. Excessive physical activity during this season can open the sweat pores and allow Yang-Qi to dissipate.

The overall principle is for every person to adjust accordingly to these cyclic changes in hot and cold in order to regulate the body's Qi and blood and simultaneously to harmonize the visceral organs.

## II Unity of Body and Mind

In CM the body is the basis of life and consciousness, whereas the mind commands the body's vital activities. Essence, Qi and vitality together constitute the source of life. Not only does a vigorous body provide a healthy condition for the mind but a vigorous mind also influences the body's Yin, Yang, Qi and blood. Moreover, avoidance of excessive or sustained passions and maintenance of emotional balance are beneficial to the equilibrium between Yin–Yang and Qi-blood.

## III Activity and Quiescence

According to CM theories Qi and blood need to be active while the mind needs to be quiescent. Only when activity and quiescence are balanced can one achieve the goal of preserving health and avoiding disease. CM teaches that activity is necessary for the conservation of the body while at the same time quiescence is necessary for the cultivation of the mind.

The aphorism states: “Running water is never stale.” Again: “A used door-hinge does not get worm-eaten.” In an analogous way appropriate physical activity ensures normal functional activities of Qi and smooth circulation of Qi and blood, prevents rigidity of the muscles and joints, invigorates the various organs, and enhances resistance against illness.

Quiescence means a mind free of anxiety and a body in relative inactivity. It does not mean a state of stupor. It is crucially important for health preservation, and its cultivation involves certain specific postures, breathing techniques and mental exercises.

For proper balance between activity and quiescence both must be exercised to a moderate degree. Either excess or deficiency of either activity or quiescence can result in harmful effects on the health of the body or the mind. For example, habitually excessive use of the eyes impairs blood; habitually excessive lying about damages Qi; habitually excessive sitting injures the muscles; habitually excessive standing weakens the bones; and habitually excessive walking injures the tendons.

Therefore, it is necessary for each person to engage in physical activity regularly, but in moderation so as not to cause extreme fatigue, and to use the mind often, but without overtaxing it.

## Section 2 Common Methods of Health Preservation

### I Cultivation of Mind

Cultivation of the mind, also known in CM as conservation of the mind and regulation of the mind, is a method of promoting physical and mental health by regulating the spirit, consciousness, and thinking.

#### 1 *Regulating Mind*

CM recognizes seven emotions as the activities of the mind. When excessive these become the seven passions: joy, rage, grief, brooding, anxiety, fear and fright.

The seven emotions are normal activities of the mind, and to a certain extent the bodily functions can regulate them and ensure that they do not become excessive. However, for a variety of reasons – individual personality, prolonged immersion in a particular emotion, sudden mental shock or violent emotional change – the emotions may exceed the capacity of bodily control, turn into the passions and become important causes of disease.

CM links the passions to the *zang-fu* organs and posits that each person's ability to tolerate emotional changes is directly related to the state of Qi and blood in these organs and to the person's constitution. In the elderly, because of senescent decline of visceral functions the regulation of emotions becomes weaker, as does the capacity to tolerate violent emotional stimuli. In turn, the passions can wear down Qi and blood of the respective visceral organs, thereby accelerating the processes of senescence and even aggravating existing illnesses. For these reasons CM regards the regulation of the mind as the starting point for preserving health.

#### i Quiescence

Quiescence means a state of mental calm and contentment. It is the way to attain open-mindedness and freedom from the self and strong appetites. The key to attaining quiescence is the systematic regulation of desires to curb any unnecessary appetite, whether of fame or material acquisition. Thus, failure to restrain appetites for wine, sex, wealth or power can damage the constitution and shorten life span. Conversely, frustration of appropriate levels of desires can prevent the attainment of quiescence and also can damage the constitution and shorten life span. Hence CM advocates temperance in seeking fame and wealth, in sexual and gastronomic pleasures and in material acquisitiveness. In addition, CM emphasizes the elimination of desires beyond one's station, jealousy, envy and other destructive appetites.

## **ii Physical Activity to Relax Mind**

Physical activity includes walks, traditional physical training and exercises. Regular physical activity can promote Qi and blood circulation, make the sinews more limber and improve visceral functions. Doing so makes the spirit glow and the mood cheerful. Regular physical activity helps promote peaceful sleep and relaxation of the mind. This is especially so in the elderly when senescence causes decline in visceral Qi, blood and functions, so that there may be mental fatigue, weakness, habitual sitting or lying down, restless sleep, slow responses and labile emotions. In such a person appropriate and regular physical activity is very important.

In addition, a program of regular physical activity can be effective rehabilitation from certain chronic illnesses.

## **iii Redirection and Purification**

Redirection requires clearing the mind and changing its focus onto something else, or altering the direction of mental tendency. Purification means purifying one's character so as to eliminate or alter erroneous perceptions and bad feelings or habits, or to enable an appropriate degree of venting, not repressing, of undesirable passions, in order to restore a cheerful and contented state of mind.

An optimistic outlook can strengthen the harmony of Qi and blood and the dynamic equilibrium of Yin–Yang. Excessive joy or rage can disturb the spirit causing it to become flighty and restless. In persons who are elderly or chronically ill, Qi and blood are already in decline and the liver is often inadequately nourished. Such persons especially should promptly reduce strong joy, rage, anxiety or grief by purification, using as aids leisurely walks in hills and woods, quiet enjoyment of music or art or other comparable intellectual and physical activities. Such appropriate activities also promote Qi and blood circulation and help eliminate undesirable emotions.

All persons should routinely attend to the maintenance of a desirable emotional state. In addition to the prompt regulation of the mind under the stress of emotional upheavals one must also during ordinary times employ a variety of techniques to cultivate a desirable mental predisposition – a sort of “pre-state.” The ancient Chinese people often used hills, streams, flowers and trees as aids in the cultivation of character. Thus, standing on a hill overlooking a vast expanse promotes a broader mind, and the different floral fragrances induce different sentiments. The ancients asserted that the flower of the silk tree can calm rage and the flower of the daylily can reduce anxiety. Music also can influence the mood. Music with a slow tempo and light tone can calm the spirit. Music with a rushed tempo and tense tone can agitate the mind. Music with a fast but light tempo and tone can relieve frustration.

#### iv Harmony with Seasons

In regulating the mind it is helpful to do so in harmony with the seasons. The characteristics of the seasons are as follows: sprouting in spring, growing in summer, harvesting in autumn and storing in winter.

In spring, as Yang-Qi ascends all things on earth begin to overflow with vigor. This is the time to wander in the gardens, tarry in the pavilions or walk in the wilderness in order to relax the mind, keep a pleasant mood and relieve the heart of emotional stagnation.

In summer, as Yang-Qi becomes abundant all things flourish and begin to bear fruits. This is the time to keep a cheerful frame of mind in order to discharge Yang-Qi.

In autumn, Yang-Qi begins to wane and Yin-Qi begins to wax. This is the time to restrain mental and emotional activities in order to avoid bleakness of the spirit.

In winter, Yang-Qi hides and Yin-Qi reaches its zenith. The wind is piercingly cold and all things go into hiding. This is not the time to vent emotions but is the time to conserve the mind and avoid depleting the spirit.

## II Conserving Essence to Preserve Health

### 1 *Self Restraint to Conserve Essence*

CM postulates that humans should follow the course of nature. It opposes celibacy, which prevents the interaction of Yin and Yang and can thereby induce depression and even illness. At the same time, it also opposes child marriage or overindulgence in sexual pleasures. Instead, each mature person should engage in sexual intercourse to an appropriate extent as determined by the person's constitution, ampleness of essence and Qi, age and other factors. Restraint means that when lust is very strong it needs to be restrained, since overindulgence can wear down heart and kidney essence excessively.

In general, sexuality emerges during puberty and becomes strong as the person enters young adulthood. It remains strong for a very long time, not beginning to decline until middle age. Only when the person enters old age does sexuality gradually subside. Strong sexuality indicates that kidney-essence is ample. If its dissipation can be prevented then kidney-essence can be maintained in a state of ampleness. This is highly beneficial to the person's bodily strength and intelligence, strengthens resistance to illness and postpones senescence. When sexual desire is not strong one must not force oneself to engage in sexual intercourse, since the weakness of sexual desire indicates that at the moment the kidney's essence and Qi are not adequate. Forced dissipation easily damages them, and over time leads to insufficiency of the kidney, decline in reproductive function and premature senescence.

## 2 *Sexual Hygiene*

It is best to engage in sexual intercourse when calm, comfortable, healthy and cheerful. Wash the genital organs prior to initiation.

There are many circumstances during which it is best for a man to refrain or to postpone sexual activity. These include the following: when fresh from a bath or shower, immediately following physical exertion, while fatigued, when hungry or sated from food, while intoxicated from drink, when overjoyed or very sad and while ill with a Heat illness. For a woman it is best to refrain from sexual activity while ill with a Heat illness, during menstruation and for up to three months following childbirth.

Protracted standing, walking or heavy work leads to fatigue of the limbs and the trunk and flaccidity of the muscles and bones. Rest is urgently needed. Sexual activity aggravates the fatigue.

When a person is in hunger the essence and Qi of the *zang-fu* organs are deficient. Sexual intercourse will cause further loss of kidney-essence.

While a man is sated from food his Qi and blood gather in the stomach and the intestines. Sexual intercourse can impede digestion and absorption by the spleen and the stomach, impairing the production of Qi and blood.

Alcohol can arouse sexual desire. However, it is acrid in flavor, very hot in nature and poisonous. It has the tendency to consume essence and injure Yin. Thus, alcoholic intoxication or using wine to enhance sexual pleasure is bound to result in the exhaustion of the kidney's genuine Qi. Sexual intercourse should be avoided while intoxicated.

The passions can induce disorders of Qi and obstruct blood flow. Sexual activity can aggravate these conditions.

In men who are always thin and weak and suffer from insufficiency of Qi sexual activity will aggravate the insufficiency and can lead to premature decrepitude.

Taking tonics that invigorate kidney-Yang can satisfy momentary pleasure by enhancing sexual drive and increasing sexual power. Nevertheless, as these tonics are dry and hot in nature, their habitual use in large doses is bound to exhaust Yin-essence, ultimately resulting in deficiency of both Yin and Yang and in premature senescence.

When it is swelteringly hot in summer Yang-Qi is most exuberant. Under these conditions, sexual intemperance can cause consumption of kidney-Yin, leading to its deficiency. When it is freezing cold in winter Yin-Qi is most excessive. Under these conditions, sexual intemperance can cause consumption of kidney-Yang, leading to its deficiency.

## III Diet Regulation

Food and drink are fundamental requirements for the vital activities of the body. They are a basic guarantee of longevity. Diet regulation is, therefore, one of the important methods of preserving health and preventing diseases.

## ***1 Balancing the Five Flavors***

In CM the five basic flavors are the following: sour, bitter, sweet, acrid and salty. Balancing the five flavors means ingesting an appropriate amount of each (see also the theory of the Five Elements).

Each of the five flavors has a special affinity for a specific *zang* organ. Thus, the sour flavor enters the liver, the bitter taste enters the heart, the sweet flavor enters the spleen, the acrid flavor enters the lung, and the salty flavor enters the kidney. If the five flavors are balanced, all five of the *zang* organs are nourished. But if they are not, the equilibrium among the *zang* organs is disturbed, the functions of one or more can become impaired or hyperactive and disease may ensue.

By extension of this principle the grains should also be appropriately balanced, as should the meats, the vegetables and the fruits. This nutritional outlook is similar to that of Western Medicine.

## ***2 Regular Times for Meals***

Having regular times for the three main meals of the day ensures regular intake of nutrients and benefits the digestive and absorptive functions of the spleen and the stomach. The amount of food and drink to be ingested should be adjusted in accordance to the normal cyclic rise and fall of the visceral organs' Yin–Yang. In general, during the day Yang is ample and the capacity of the body to act is high. So the amount of dietary intake may be higher. Following sunset Yang recedes, Yin advances and the person prepares for rest and sleep. It is appropriate then to reduce dietary intake.

At the same time, it is advisable to anticipate needs – eating before hunger and drinking before thirst – but without eating or drinking to excess. Doing so avoids injury to the spleen and the stomach. There is a folk saying: “Eating every meal to 80% full guarantees a healthy body.”

## ***3 Eating Clean and Bland***

This means increasing the amount of vegetarian and bland foods in the diet. “Vegetarian” and “bland” are comparative terms here. They do not mean complete abstention from meats or foods with taste.

The principal reason is because a diet high in fats, sweets and spices can easily induce the formation of Phlegm, promote transformation into Fire, and lead to such illnesses as furuncles, diabetes and Wind-invasion (stroke). Elderly persons, in particular, should embrace stricter vegetarianism and increase the proportions of vegetables, fruits, bean products and vegetable oils. Doing so helps to maintain unimpeded bowel functions and to promote smooth functioning of the spleen and the stomach.

## **Guidance for Study**

### **I Aim of Study**

This chapter introduces the principles of health preservation. It focuses on providing learners with the concept of health and of the avoidance of illness in order to prolong life.

### **II Objectives of Study**

After completing this chapter the learners will:

1. Be familiar with the principles of health preservation in CM;
2. Understand the methods of health preservation.

### **III Exercises for Review**

1. Discuss the relationship between activity and quiescence, and their importance for health preservation.
2. What is the theoretical basis of preserving both the body and the mind?
3. Discuss the role of diet regulation in health preservation.
4. Give examples to illustrate the importance of physical activity in health preservation.
5. Discuss the role of sexual restraint and hygiene in health preservation.

## Appendix I: Tongue Pictures



**Fig. A.I.1** Normal tongue: light red tongue with thin, white coating



**Fig. A.I.2** Pale tongue with indentations and thin, white greasy coating



**Fig. A.I.3** Pale tongue with white slippery coating



**Fig. A.I.4** Light red tender tongue with thin, white greasy coating



**Fig. A.I.5** Red and dull tongue with white greasy coating



**Fig. A.I.6** Light red tongue with thin, white greasy coating



**Fig. A.I.7** Red and dull tongue with white greasy coating



**Fig. A.I.8** Light red tongue with yellow greasy coating at the root



**Fig. A.I.9** Light red tongue with white greasy coating at the root



**Fig. A.I.10** Light red tongue with indentations and a little white coating



**Fig. A.I.11** Light purple tongue with thin white greasy coating



**Fig. A.I.12** Light purple tongue with exfoliation of white, greasy coating



**Fig. A.I.13** Dull purple fissured tongue



**Fig. A.I.14** Light red, glossy tongue (mirror-like)



**Fig. A.I.15** Pale, swollen tongue with thick white greasy coating

# Index

## A

- A Compendium on Febrile Diseases, 7
- Anticonvulsant therapy (wind suppression), *see* Therapeutics, common therapeutic methods
- Astringency (consolidation), *see* Therapeutics, common therapeutic methods
- Auscultation, *see* Diagnosis, methods

## B

- Bian Que, 35
- Blood, 52, 54, 63, 64, 113, 119–121, 144, 155, 159, 180, 182–185, 187, 188, 288, 290–293, 295, 301, 303, 317, 330, 345
  - basic concept of, 113
  - circulation, 58, 92, 97, 115
  - formation of, 91, 113
  - physiological actions, 115
  - regulation, *see* Therapeutics, common therapeutic methods
  - relationship between blood and body fluids, 121
  - relationship between Qi and blood, 119
  - stasis, 154–155, 183–184, 188, 292
  - syndrome, 290
  - simultaneous Qi and blood syndrome, 292
  - diagnosis and blood, 184
- Body fluids, 116–122
  - abnormal metabolism of, 185
  - basic concept of, 116
  - distribution of, 117
  - excretion of, 117
  - formation of, 117
  - physiological actions, 119

- relationship between blood and body fluids, 121
- relationship between Qi and body fluids, 120

Brain, 74, 87

## C

- Catharsis (purgation), *see* Therapeutics, common therapeutic methods
- Chao Yuanfang, 6, 8
- Chen Wuze, 131
- Chen Ziming, 6, 8
- Chinese herbs, 5, 8
- Classic of A's and B's of Acupuncture and Moxibustion, 6, 8
- Classic on Medical Problems, 4, 5, 123, 127
- Classification by analogy, 40
- Climatic pathogenic evils, 132–142
- Cold, 135, 160, 281–283, 291, 298, 301, 305, 309
  - as pathogenic evil,
    - climatic pathogenic evil, 135
    - endogenous pathogenic evil, 160
  - in blood, 291
  - syndrome, 282
- Combination of therapeutic methods, 337
- Compendium of Materia Medica, 7, 8, 87
- Complete Effective Prescriptions for Women, 6, 8
- Complete Works of Jingyue, 7, 8
- Concept of illness in CM, 35
- Contrary treatment, 325
- Cooling (heat-clearing), *see* Therapeutics, common therapeutic methods
- Correspondence between human body and nature, 44

**D**

- Dampness, 102, 137, 161, 299, 305, 310
  - as pathogenic evil,
    - climatic pathogenic evil, 137
    - endogenous pathogenic evil, 161
- Defensive Qi, *see* Qi
- Deficiency, 159, 162, 166, 172, 176–178, 180, 184, 185, 188, 284, 287, 288, 292–295, 297, 298, 300, 303–308, 310
- Diagnosis, 30, 206, 256
  - approach to, 193, 319
  - differential diagnosis, 194–196, 279–319, 321
  - four methods of diagnosis, 193–194
  - symptom analysis, 194–195, 196, *see also* Symptom analysis
  - diagnostic methods, 199–276
    - auscultation, 226–229
    - inquiring, 253–276
    - inspection, 199–226
    - olfaction, 226–229
    - palpation, 249–253
- Diaphoresis (exterior-release), *see* Therapeutics, common therapeutic methods
- Diet, 147
  - clinical significance of, 215–216
  - impairment due to improper, 147–148
  - regulation, 356–357
- Dissipation (reduction, elimination), *see* Therapeutics, common therapeutic methods
- Dryness, 102, 139
  - as pathological evil, 139
  - climatic pathogenic evil, 132
  - endogenous pathogenic evil, 133, 161

**E**

- Early treatment to prevent progression of illness, *see* Therapeutics, principles
- Eight fundamentals, 279–288
  - cold–heat, 281–284
  - deficiency–strength, 284–286
  - exterior–interior, 280–281
  - Yin–Yang syndromes, 286–288
- Eight principle methods, 337
- Emesis, *see* Therapeutics, common therapeutic methods
- Endogenous pathogenic evils, 158–163
- Essence, 33, 69
  - food, 113
  - health preservation, 355

- in view of life in CM, 33
- kidney, 115, 307

Essentials from the Golden Cabinet, 5  
 Etiology in Chinese medicine, 131–163  
 Evil Qi, *see* Qi  
 Excretions and secretions, 223–226

**F**

- Fire, 139
  - as pathological evil, 139
  - climatic pathogenic evil, 139–142
  - endogenous pathogenic evil, 162–163
- Five Elements, 21, 330
  - application in CM, 27–31
  - basic contents of, 2
  - theory, 21–31
- Five flavors, 22, 23, 33, 148, 357
- Four diagnostic methods, 8, 20, 42, 199, 321
- Four phases, 315–317
  - blood phase, 317
  - defensive phase, 316
  - nutritive phase, 316
  - Qi phase, 316
- Fu*, 78, 89, 103, 144, 145, 170, 171, 313
  - relationships,
    - among *fu*, 103–105
    - between *zang* and *fu*, 99–103
  - transmission of illness among *zang-fu* viscera, *see* Illness, transmission
- Functional imbalance, 35

**G**

- Gallbladder, 78–79
  - gallbladder illnesses, 309
  - relationship between gallbladder and *zang* viscera, liver, 102,
- General Treatise on the Causes and Symptoms, 6, 8
- Genuine Qi, *see* Qi
- Golden Mirror of Medical Works, 7
- Gong Tingxian, 7

**H**

- Han dynasty, 3–5, 9, 131, 312
- Health preservation, 44, 351–357
- Heart, 52
  - heart illnesses, 294
    - blazing of heart-fire, 296
    - blockage of heart meridians, 296
    - deficiency of heart-Qi, 294
    - deficiency of heart-Yang, 294
    - deficiency of heart-Yin, 295

- insufficiency of heart-blood, 295
    - phlegm clogging heart orifices, 296
    - phlegm-fire disturbing heart, 297
  - influence of heart and kidney on Qi transformation, 126
  - physiological functions of, 52
  - relationship between heart and *fu* viscera, small intestine, 100
  - relationship between heart and *zang* viscera,
    - kidney, 93
    - liver, 91
    - lung, 90
    - spleen, 90
  - relationship of heart to other organs and tissues, 54
- Holism in,
- holistic systemic method, 40
  - human body as organic whole, 37
  - inferring the interior from the exterior, 41
  - inquiry methodology in, 39
- Hua Tuo, 127
- Huangdi Internal Classic, 4, 5, 33, 34, 49,  
*see also* Internal Classic
- Huangfu Mi, 6, 8

## I

- Illness, 35
- concept, 35
  - etiology, 131–163
    - external cause, 132
    - internal cause, 144
    - other cause, 150
  - pathology, 165–168
    - pathologensis, 165
  - progression, 173, 321
  - transmission, 169–172
    - among *zang-fu* viscera, 170
    - exterior-interior, 170
    - up-down, 170
- Inquiring, 253–276, *see* Diagnosis, methods
- Inspection, 199–226, *see* Diagnosis, methods
- Infant's finger venules, 302
- Internal Classic, 4, 5, 6, 10, 38, 39, 47, 50, 77, 88, 122, 131, 148, 165, 317, 321,  
*see also* Huangdi Internal Classic
- Irregular organs, 78, 87

## J

- Jin dynasty, 4–6, 8, 117
- Jueyin, *see* Six meridians

## K

- Key to Therapeutics of Children's Diseases, 6, 8
- Kidney, 69
- influence of heart and kidney on Qi transformation, 126
  - kidney illnesses, 306
    - deficiency of kidney-essence, 307
    - deficiency of kidney-Yang, 306
    - deficiency of kidney-Yin, 306
    - failure of kidney to accept Qi, 308
    - failure of kidney-Qi to solidify, 307
  - kidney's primordial Yang as source of motive force, 123
  - kidney-essence, *see* Essence
  - physiological functions of, 69
  - relationship between kidney and *fu* viscera, urinary bladder, 103
  - relationship between kidney and *zang* viscera,
    - heart, 93
    - liver, 98
    - lung, 96
    - spleen, 99
  - relationship of kidney to other organs and tissues, 74

## L

- Large intestine, 83
- large intestine illnesses, 310
    - chronic diarrhea in large intestine insufficiency, 311
    - dampness-heat in large intestine, 310
    - fluid deficiency in large intestine, 130
  - relationship between large intestine and *zang* viscera, lung, 101
- Li Gao, 6
- Liu Wansu, 6
- Liver, 64
- influence of lung and liver on Qi transformation, 126
  - liver illnesses, 302
    - abnormal rise of liver-Yang, 304
    - cold congealing liver meridians, 304
    - dampness-heat in liver meridians, 305
    - deficiency of liver-Yin, 303
    - insufficiency of liver-blood, 303
    - liver-wind stirring in interior, 304
    - stagnation of liver-Qi, 302
    - upward flaming of liver-fire, 303
  - physiological functions of, 64
  - relationship between liver and *fu* viscera, gallbladder, 102

- relationship between liver and *zang* viscera,
  - heart, 91
  - kidney, 98
  - lung, 95
  - spleen, 97
- relationship of liver to other organs and tissues, 68
- Longevity and Life Preservation, 7
- Lower-jiao, *see* Sanjiao
- Lung, 56, 90
  - influence of lung and liver on Qi transformation, 126
  - lung illnesses, 297
    - deficiency of lung-Qi, 297
    - deficiency of lung-Yin, 298
    - heat accumulation in lung, 299
    - phlegm-dampness obstructing lung, 299
    - wind-cold binding lung, 298
    - wind-heat invading lung, 299
  - physiological functions of, 56, 58
  - relationship between lung and *fu* viscera,
    - large intestine, 101
  - relationship between lung and *zang* viscera,
    - heart, 90
    - kidney, 96
    - liver, 95
    - spleen, 94
  - relationship of other organs and tissues, 59

## M

- Mediation (harmonization), *see* Therapeutics, common therapeutic methods
- Medical Secrets of an Official, 6
- Middle-jiao, *see* Sanjiao
- Ming dynasty, 6–8, 14, 45, 77, 123, 124, 281

## N

- Newlonpaw Pharmacopoeia, 6
- Newly Revised Materia Medica, 6, 8
- Nutritive Qi, *see* Qi

## O

- Olfaction, *see* Diagnosis, methods
- Orifice-opening (resuscitation), *see* Therapeutics, common therapeutic methods

## P

- Palpation, *see* Diagnosis, methods
- Pathogenesis, *see* Illness, pathology
- Pathogenic evil, 132–163

- Pathology, *see* Illness
- Pericardium, 52–56
- Pestilential pathogenic evils, 142–143
- Phlegm, 151, 187,
  - as pathological products that lead to illnesses, 151–153
- Prescriptions of Universal Relief, 7
- Prescriptions Worth a Thousand Gold, 6, 8
- Preserving both body and vitality, 45
- Pulse Classic, 5, 8
- Pulse-taking, 229–248

## Q

- Qi,
  - classification of, 110
  - concept of, 9, 107
  - defensive, 112
  - distribution of, 110
  - dynamics, 124
  - evil, 36, 166, 172
  - features of, 10
  - formation of, 107
  - genuine, 36, 110, 166, 172
  - illness, 169
  - motive force for, 123
  - movement, 109
  - nutritive, 111
  - physiological actions of, 108
  - regulation, *see* Therapeutics, common therapeutic methods
  - relationship between Qi and blood, 119
  - relationship between Qi and body fluids, 120
  - simultaneous Qi and blood syndrome, 292
  - thoracic, 111
  - transformation of, 10, 122–126
  - unity of, 9
  - vital, 34
- Qian Yi, 8
- Qin dynasty, 3, 5, 9
- Qing dynasty, 6–8, 77, 126, 315, 317

## R

- Restoration (tonification), *see* Therapeutics, common therapeutic methods
- Rheum, 153, 187

## S

- Sanjiao, 84–86
  - lower-jiao, 84, 86–87,
    - illness, 318

- middle-jiao, 84, 86–87,
    - illness, 318
  - upper-jiao, 84, 86
    - illness, 317–318
  - diagnosis by Sanjiao, 317
  - transformation of Sanjiao-Qi, 127
  - Sexual hygiene, 356
  - Shaoyang, *see* Six meridians
  - Shaoyin, *see* Six meridians
  - Shennong's Herbal Classic, 5
  - Simultaneous syndromes, 292–293
  - Six meridians, 4, 169, 194, 195, 279, 294, 312
    - Jueyin, 259, 312, 315
    - Shaoyang, 252, 258, 259, 312, 314, 340
    - Shaoyin, 312, 314, 315, 327
    - Taiyin, 223, 312, 314
    - Taiyang, 259, 312–313, 322
    - Yangming, 111, 244, 258, 259, 312–314, 318, 322, 339
  - Skin, 217–222
    - skin color, 200–205
      - abnormal skin color, 201
      - diagnostic significance of, 201
      - normal skin color, 201
  - Small intestine, 81–83
    - relationship between small intestine and *zang* viscera, heart, 100
    - small intestine illnesses, 311
  - Song dynasty, 5, 6, 8, 131
  - Spleen, 60
    - influence of spleen and stomach on Qi
      - transformation, 125
    - physiological function of, 60
    - relationship between spleen and *fu* viscera, 101
    - relationship between spleen and *zang* viscera, 90
      - heart, 90
      - kidney, 99
      - liver, 95, 97
      - lung, 94
    - relationship of other organs and tissues, 63
    - spleen illnesses, 299
      - cold-dampness encumbering spleen, 301
      - dampness-heat lodging in spleen, 301
      - deficiency of spleen-Qi, 300
      - deficiency of spleen-Yang, 300
      - sinking of middle-Qi, 300
      - spleen not controlling blood, 301
  - Standard treatment, 325
  - Standards of Diagnosis and Treatment, 7
  - Stomach, 80–81
    - influence of spleen and stomach on Qi
      - transformation, 125
    - stomach illnesses, 308
      - cold in stomach, 309
      - deficiency of stomach-Yin, 308
      - food retention, 308
      - heat in stomach, 309
    - relationship between stomach and *zang* viscera, spleen, 101
  - Stones, 157
  - Strength, 172, 284–286
  - Struggle of genuine-Qi and evil-Qi, 36
  - Su Jing, 6, 8
  - Sui dynasty, 5, 6, 8
  - Summer heat, 135
  - Sun Simiao, 6, 8
  - Symptom analysis, 42–44, 165, 172, 194–196, 279, 293, 321
    - Chinese medicine methodology, 42–44
      - treating different illnesses with same method, 43
      - treating same illness with different methods, 43
    - diagnostic approach, *see* Diagnosis,
- T**
- Taiyang, *see* Six meridians
  - Taiyin, *see* Six meridians
  - Tang dynasty, 5–8
  - Tang Herbal, 6
  - The Four Great Schools of Jin-Yuan, 6
  - Therapeutics, 20, 321–349
    - principles,
      - early treatment to prevent progression of illness, 321
      - treatment attack the root of illness, 323–331
      - treatment in accordance with, 332–337
    - common therapeutic methods,
      - attack and restoration, 349
      - anticonvulsant therapy (wind suppression), 347
      - astringency (consolidation), 346
      - blood regulation, 345
      - catharsis (purgation), 339
      - cooling (heat-clearing), 340
      - cooling and warming, 348
      - diaphoresis (exterior-release), 337
      - diaphoresis and catharsis, 348
      - dissipation (reduction, elimination), 342
      - dissipation and restoration, 349
      - emesis, 338

- mediation (harmonization), 340
- orifice-opening (resuscitation), 346
- Qi regulation, 344
- restoration (tonification), 343
- warming, 108, 341
- Thoracic Qi, *see* Qi
- Tongue, 205–216
  - clinical significance, 215
  - contents of tongue diagnosis, 206
- Transmission of illnesses, *see* Illness
- Treating appearance, 323
- Treating different illnesses with same method, *see* Symptom analysis, Chinese medicine methodology
- Treating same illness with different methods, *see* Symptom analysis, Chinese medicine methodology
- Treatise on Cold-Attack, 4, 312, 322
- Treatise on Cold-Attack and Miscellaneous Diseases, 4, 5
- Treatise on Dampness-heat Diseases, 7
- Treatise on Febrile Diseases, 7, 8
- Treatise on Pestilence, 7, 8
- Treatise on the Differentiation and Treatment of Febrile Diseases, 7, 8
- Treatment attack the root of illness, *see* Therapeutics, principles of
- Treatment in accordance with, *see* Therapeutics, principles of

## U

- Union of body and vitality, 34
- Unity of human body and universe, 38
- Unity of the human body and social circumstances, 39
- Upper-jiao, *see* Sanjiao
- Urinary bladder, 83–86
  - relationship between urinary bladder and *zang* viscera, kidney, 103
  - urinary bladder illness, 311
- Uterus, 88

## V

- View of life in Chinese medicine, 33
- Vital gate, 69–78

## W

- Wang Kengtang, 7
- Wang Tao, 6
- Warming, *see* Therapeutics, common therapeutic methods

- Wind, 133
  - as pathological evil,
    - climatic pathogenic evil, 133
    - endogenous pathogenic evil, 158

Wu Qian, 7

Wu Tang, 7, 8

Wu Youke, 7

## Y

- Yang, 11, 13–17, 123, 159, 160, 162, 174–179, 217, 286, 287, 294, 300, 306, 329
  - deficiency, 176
  - depletion, 179
  - excess, 175, 176
  - kidney's primordial Yang, 123
  - mutual injury, 177
- Yangming, *see* Six meridians
- Yang-Qi, 10, 11, 14, 15, 19, 28, 33, 38, 45, 52, 72, 73, 77, 102, 108, 123, 124, 135, 138–140, 148, 158, 160, 162, 166, 167, 169, 175–179, 185, 204, 205, 210–213, 235–238, 241, 249–251, 257–259, 261, 262, 269, 282, 284–288, 292, 296, 305, 311, 315, 327, 331, 333, 334, 336, 340–342, 351, 352, 355, 356
- Ye Gui, 7, 8
- Yin, 11, 13–17, 75, 98, 160, 162, 174–179, 217, 286, 287, 295, 298, 303, 306, 308, 329
  - deficiency, 159, 162, 176–178
  - excess, 175
  - mutal injury, 177
- Yin-Qi, 10, 11, 14, 33, 45, 123, 124, 140, 175, 287, 333, 351, 355, 356
- Yin-Yang, 13
  - pathological change, 19
  - syndrome, 286
  - theory, 11, 13, 17, 174, 329
- Yuan dynasty, 6, 77, 205

## Z

- Zang*, 28, 29, 45, 51, 89, 90, 99, 144, 145, 170
  - relationships, 89, 99
  - transmission of illness among *zang-fu* viscera, *see* Illness, transmission
- Zhang Congzheng, 6
- Zhang Jingyue, 7, 45, 77, 123, 281, 344
- Zhang Zhongjing, 4, 131, 312
- Zhu Zhenhe, 6, 7