

**SYLLABUS OF
CLINICAL MEDICAL EDUCATION
FOR INTERNATIONAL MEDICAL STUDENTS
(IN ENGLISH)**

(The Second Volume)

**来华留学生
临床医学专业本科
(英语授课) 教学大纲 (下册)**

中国教育国际交流协会国际医学教育分会 编

Edited by International Medical Education Committee,
China Education Association for International Exchange

清华大学出版社



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Foreword

序 言

随着中国社会、经济、文化的快速发展，国际影响力的不断提升，“留学中国计划”的逐步实施，越来越多的外国人留学中国，来华留学生规模不断扩大。2018年，有来自196个国家和地区的492 185名各类外国留学生在我国的1004所高等院校学习，我国已经成为亚洲最大的留学目的地国家。来华学习医学的留学生人数增长迅速，目前来华学习医学的留学生人数已位居来华留学生人数的首位，2017年来华学习医学本科的留学生4.69万人，其中临床医学本科留学生3.74万人，来华医学留学生教育为生源国培养了大批的医学人才。

教育部历来高度重视来华医学留学生教育质量，不断加强对医学留学生教育的规范和管理，提出了“提质增效、质量优先”的发展战略。在2007年制定的《来华留学生医学本科教育（英语授课）质量控制标准暂行规定》基础上，教育部又委托中国教育国际交流协会国际医学教育分会制定了《来华留学生临床医学专业本科教育（英语授课）质量控制规定》，进一步规范和加强来华留学生临床医学本科教育。

2017年9月，中国教育国际交流协会国际医学教育分会在浙江大学正式成立。2018年3月，教育部国际合作与交流司组织专家对52所招收临床医学留学生的高校实施调研。2018年10月，中国教育国际交流协会又组织专家对部分高校的到来华医学留学生教育的管理工作进行了专项调研，深入了解全国来华医学留学生教育的基本情况，为制定来华医学留学生教育政策提供依据。

由于来华留学生临床医学专业本科教育（MBBS）在我国较短的时间迅速发展，一些学校不能适应来华留学发展的需要，一些学校的办学资源和基础设施存在差异，课程设置差异也较大，有的学校开设课程不符合临床医学专业教育的基本要求，影响了来华留学生临床医学专业教育的健康发展，也影响了我们的国际声誉。新近公布的《中国本科医学教育标准——临床医学专业（2016年版）》和即将公布实施的《来华留学生临床医学专业本科教育（英语授课）质量控制规定》对临床医学专业教育和来华留学生临床医学专业教育做出了具体规定和要求，教学大纲是教师和学生教学活动中重要的纲领性文件，制定MBBS教学大纲就是落实两个标准的具体措施之一。

为规范来华留学生临床医学专业本科教育，提高来华医学留学生的教育质量，在教育部国际合作与交流司、中国教育国际交流协会领导和清华大学出版社的支持下，启动了MBBS教学大纲的编写工作。2016年4月，在天津医科大学召开了MBBS教学大纲编写会议，30多所高校的领导和专家经过讨论、磋商，成立了“来华留学生临床医学专业本科（英语授课）教学大纲编审委员会”，制定了大纲编写的体例和编写原则，并收集了留学生主要生源国的教学大纲、执业医师资格考试要求等作为参考，会议确定了各科目教学

大纲编写任务及牵头单位。在各科目主编的精心组织下，2017年5月完成了来华留学生临床医学专业本科（英语授课）53门课程教学大纲的初稿，2017年6月在清华大学召开了大纲核心专家组的审稿会议，对大纲提出了修改意见，经各主编再次修改后，又进行了第三次修改，2018年9月在清华大学举行大纲审定稿会，来自全国近40所高校的著名教授、大纲主编、课程负责人集聚一堂为来华留学生临床医学专业53门课程的英语教学大纲做了最后的审定。

现在，历时3年，各高校翘首期盼的《来华留学生临床医学专业本科（英语授课）教学大纲》由清华大学出版社正式出版，供全国使用。参加编写来华医学留学生53门课程英语授课教学大纲的专家由我国长期从事医学留学生教育的教授、学者和一线教师组成，他们在全国医学高等院校来华医学留学生教育领域里具有代表性和影响力，MBBS教学大纲的编写出版凝聚了我国众多高校和专家的辛劳和努力。该套教学大纲主要供来华临床医学专业本科留学生，本土长学制医学生、医学本科生英语或双语教学使用。

来华留学生的教学质量是来华留学教育事业可持续发展的核心保障，教学大纲是来华医学留学生教育教材建设的重要组成部分。制定MBBS教学大纲是一件具有里程碑意义的工作，也是一件规范高校来华留学生临床医学专业教育的尝试性和探索性的工作，它不仅填补了我国来华医学留学生教学大纲的空白，而且对规范来华医学留学生教学，提高培养质量将发挥重要作用，同时也将对留学生系统性教材建设和教学改革发挥指导作用。

MBBS教学大纲的出版是一个良好的开端，希望在今后的来华医学留学生教学中能够审视理解、多提意见、反馈信息、不断修改，使其日臻完善。

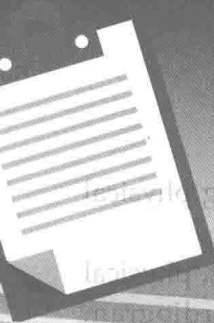
张岫美 李国霞

2019年5月

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PHYSICAL DIAGNOSTICS

临床诊断学

Objectives

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Course Description

The course of diagnosis is a bridge between the basic medical course and clinical works. Student will learn the basic technique and the principles of how to make a diagnosis. The course includes 6 parts which covering physical examination, instruments

examination and laboratory test. The skills of taking a history and performing physical examination is still the most important skills for physicians.

The physical diagnosis include following parts: symptomatology, inquiry, physical examination, medical record writing, the diagnosis of diseases, electrocardiogram diagnosis (ECG), and ultrasound diagnosis et al.

Objectives

1. Master the mechanisms or pathogenesis of common symptoms.
2. Master the techniques of taking the patient's history.
3. Master the common methods of physical examination.
4. Master the mechanisms of typical signs and their clinical values.
5. Master the principle of how to make a medical record.
6. Master the patterns of normal ECG.
7. Be familiar with the features of abnormal ECG in common cardiac disease.
8. Be familiar with the laboratory examinations and their clinical values.
9. Cultivate the ability to analyze and synthesize clinical data, writing complete medical record.
10. Understand the mechanism of the ECG and ultrasound diagnosis.

Teaching and Learning Methods

Theory: Teaching diagnosis to medical students is provided with the help of lectures that deal with the basic technique and the principles of how to make a diagnosis.

Practical: Practical training asks for medical students to know according to the clinical practice, to be familiar with the relationship between clinical symptoms, signs and physical examination, the reports of the laboratory tests and special examination, then make a diagnosis.

Recommended Textbooks

- Francis Greenspan, David Gardner. 2001. Basic and Clinical Endocrinology [M]. 6th ed. New York: McGraw-Hill Companies.
- H Rouden Jones, Jayashri Srinivasan, Gregory J. 2012. Netter's Neurology [M]. 2th ed. Philadelphia: Elsevier Inc.
- Larry Jameson. 2010. Harrison's Endocrinology [M]. 2nd ed. New York: McGraw-Hill Companies.
- Steven Laureys, Giulio Tononi. 2009. The Neurology of Consciousness: Cognitive Neuroscience and Neuropathology [M]. San Diego: Elsevier Ltd.
- Thomas Andreoli. 2001. Cecil Essentials of Medicine [M]. 5th ed. Philadelphia: WB Saunders Company.

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General Introduction



OBJECTIVES

1. To master the important role of diagnosis.
2. Be familiar with the main content of diagnosis.
3. Be familiar with the fundamental skills of physical examination.

COURSE CONTENTS

1. Expound the properties of clinical diagnosis and its clinical significance.
2. Explain the contents of clinical diagnosis and its clinical types and emphasizing the combination of theory and practice.
3. Presenting the purpose and requirements of clinical diagnosis and asking the students to master the mechanisms or pathogenesis of common symptoms and signs, inquire about the patient's history, do a complete physical examination and write case history.
4. Introducing the history of diagnosis and novel progress.

Part One The Common Symptoms

OBJECTIVES

1. To master the definition of all the common symptoms.
2. Be familiar with the etiology, the pathogenesis, the classification and the accompanying symptoms.

COURSE CONTENTS

Chapter 1 Fever

1. The definition of fever.
2. The etiology of fever: infectious and non-infectious.
3. The clinical profiles of fever.
4. The onset and the process of fever.
5. The clinical patterns and the clinical significance of fever.
6. The accompanying symptoms of fever.
7. How to conduct an interrogation.

Chapter 2 Obesity

1. The definition and measurement of obesity.
Obesity is best defined as the presence of an abnormal absolute amount or relative proportion of body fat. The clinical definition of obesity is a body mass index (BMI) of

30 or higher.

2. Classification of obesity.

Based on BMI:

- (1) Underweight (BMI < 18.5).
- (2) Normal (BMI 18.5~24.9).
- (3) Overweigh (BMI 25.0~29.9).
- (4) Obese (BMI 30.0~39.9).
- (5) Severely obese (BMI > 40.0).

3. The pathogenesis and etiologic classification of obesity.

- (1) Neuroendocrine diseases associated with obesity.
- (2) Drug-induced obesity.
- (3) Dietary obesity.
- (4) Reduced energy expenditure.
- (5) Genetic factors in obesity.

4. Evaluation of the obese patient.

(1) Central or visceral-abdominal obesity (a waist measurement of >102cm in men and >88cm in women).

(2) Gluteal-femoral obesity (fat deposits are located primarily below the waist in the hips and thighs).

5. Medical consequences of obesity.

- (1) Type 2 DM.
- (2) Hypertension.
- (3) Hyperlipidemia and dyslipidemia.
- (4) Arteriosclerotic heart disease and stroke.
- (5) Gallbladder disease, osteoarthritis, cancers and other conditions.

Chapter 3 Emaciation

1. The definition and measurement of emaciation.

2. Some conception about emaciation: underweight, cachexia.

3. The common causes of emaciation:

- (1) Endocrine and metabolic diseases (Thyrotoxicosis, diabetes).
- (2) Acute and chronic infection.
- (3) Cancer.
- (4) Gastrointestinal tract diseases.
- (5) Drug abuse.
- (6) Emotional illness.

4. The clinical manifestation and concomitant symptoms:

- (1) Endocrine and metabolic diseases.
- (2) Chronic wasting diseases.
- (3) Malnutrition.
- (4) Anorexia nervosa.
- (5) Mental disorder.

Chapter 4 Anemia

1. Definition of anemia.

Anemia is defined as a decrease in the total amount of hemoglobin (Hb), Red Blood Cells (RBCs) and hematocrit (HCT) in the blood. In China, diagnosis of anemia in men is based on a hemoglobin of less than 120 g/L, while in women, it must be less than 110 g/L, in pregnant women, it is less than 100 g/L.

2. Classification of anemia.

Based on the morphology of RBC:

- (1) Normocytic anemia.
- (2) Macrocytic anemia.
- (3) Microcytic hypochromic anemia.

3. Causes and mechanisms of anemia.

- (1) Impaired production.
- (2) Increased destruction.
- (3) Blood loss.

4. Symptoms of anemia.

- (1) Common symptoms: paleness, fatigue, dizziness, tinnitus.
- (2) Cardiovascular symptoms: palpitations, short of breath, tachycardia, cardiac diation.
- (3) Digestive symptoms: anorexia, nausea, vomiting, abdominal distension.
- (4) Urogenital symptoms: diuresis, albuminuria.

5. The common symptoms accompanied with anemia.

- (1) Iron deficiency anemia: koilonychias, glossitis, pica.
- (2) Megaloblastic anemia: "beefy" tongue, peripheral neuritis.
- (3) Aplastic anemia: bleeding and infection.
- (4) Hemolytic anemia: jaundice, hemoglobinuria, hepatosplenomegaly.

Chapter 5 Mucocutaneous Hemorrhage

1. Causes and mechanism of mucocutaneous hemorrhage.

- (1) Vessel wall disorders.
- (2) Abnormality of platelet account or function.
- (3) Deficiency of coagulation factors.
- (4) Increased coagulant in blood.
- (5) Hyperfibrinolysis.

2. Symptoms of mucocutaneous hemorrhage.

- (1) Petechia: diameter of subcutaneous hemorrhage $\leq 2\text{mm}$.
- (2) Purpura: diameter of subcutaneous hemorrhage 3~5mm.
- (3) Ecchymosis: diameter of subcutaneous hemorrhage $> 5\text{mm}$.
- (4) Hematoma.
- (5) Blood blisters.
- (6) Epistaxis.

3. The common symptoms accompanied with mucocutaneous hemorrhage.

- (1) Allergic purpura: arthralgia, stomachache.

- (2) ITP or DIC: extensive hemorrhage like hematuria and melena.
- (3) Hemophilia: joint pain and deformity.

Chapter 6 Cough and Expectoration

1. Definition of cough.
2. Causes and mechanisms of cough.
 - (1) Respiratory disorders.
 - (2) Pleural diseases.
 - (3) Cardiovascular disorders.
 - (4) Central nervous system disorders.
3. Mechanisms of sputum production.
 - (1) Transudates.
 - (2) Exudates.
 - (3) Mucus.
 - (4) Dusts aspirated.
 - (5) Infected tissues.
4. The common symptoms accompanied with sputum.
 - (1) Blood sputum.
 - (2) Bloody gelatinous sputum.
 - (3) Rusty sputum.
 - (4) Stringy mucoid sputum.
 - (5) Frothy sputum.
 - (6) Purulent sputum.
 - (7) Broncholiths.

Chapter 7 Chest Pain

1. The definition of chest pain.
2. The common causes of chest pain: acute coronary syndrome; aortic dissection; pulmonary embolism; angina; diseases of chest wall; lung diseases; mediastinal diseases; gastrointestinal diseases; mental disorder.
3. The clinical manifestation and risk assessment: check the vital sign and history taking.
4. The differential diagnosis of chest pain.

Chapter 8 Dyspnea

1. Causes and mechanisms of dyspnea.
 - (1) Respiratory disorders.
 - (2) Pleural diseases.
 - (3) Cardiovascular disorders.
 - (4) Central nervous system disorders.
2. Differential diagnosis of dyspnea.
 - (1) Cardiac dyspnea.
 - (2) Pulmonary dyspnea.

Chapter 9 Cyanosis

1. The definition of cyanosis.

Cyanosis is defined as the bluish or purplish discolouration of the skin or mucous membranes due to the tissues near the skin surface having low oxygen saturation.

2. Cause and mechanisms of cyanosis.

(1) Central nervous system:

1) Intracranial hemorrhage.

2) Drug overdose.

3) Tonic-clonic seizure.

(2) Respiratory system:

1) Pneumonia.

2) Bronchiolitis.

3) Bronchospasm (e. g. asthma).

4) Pulmonary hypertension.

5) Pulmonary embolism.

6) Hypoventilation.

7) Chronic obstructive pulmonary disease, or COPD (emphysema).

(3) Cardiovascular diseases:

1) Congenital heart disease.

2) Heart failure.

3) Valvular heart disease.

4) Myocardial infarction.

(4) Blood:

1) Methemoglobinemia.

2) Polycythaemia.

(5) Others:

1) High altitude.

2) Hypothermia.

3) Obstructive sleep apnea.

Chapter 10 Palpitation

1. Definition of Palpitation:

Palpitation is defined as an awareness of the beating of the heart, an awareness commonly brought about by a change in the heart's rhythm or rate or by an augmentation of its contractility.

2. Causes and mechanisms of palpitation.

(1) Augmentation of heart contractility.

(2) Arrhythmia.

(3) Cardiac neurosis.

3. The common causes of palpitation: Augmentation of heart contractility.

(1) Physiological augmentation: Exercising strongly and overnervous, after drinking coffee, tea, alcohol, taking medicine such as ephedrine, aminophylline, atropin etc.

(2) Pathological augmentation: Ventricular hypertrophy, thyrotoxicosis, anemia,