



# 美国医师执照考试(USMLE) Medicine 内科学(第13版)

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- Over 30 high-yield images

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# 内科学

# Medicine

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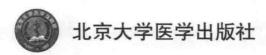
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# 出版说明

美国医师执照考试(United States Medical Licensing Examination, USMLE)是针对全世界各国医学院的学生或毕业生欲到美国从医的执照考试,考试全部为选择题,采用计算机考试。考试分为:

Step 1 (第一阶段): 考查医学基础学科知识,包括解剖学 Anatomy, 生理学 Physiology,生物化学 Biochemistry,微生物学 Microbiology, 病理学 Pathology,药理学 Pharmacology,遗传学 Genetics,营养学 Nutrition,神经科学 Neuroscience 等。

# Step 2 (第二阶段):

- (1) 临床医学知识 (Clinical Knowledge, CK): 包括内科学 Medicine, 外科学 Surgery, 妇产科学 Obstetrics and Gynecology, 儿科学 Pediatrics, 神经病学 Neurology, 家庭医学 Family Medicine, 急诊医学 Emergency Medicine, 预防医学 Preventive Medicine等。
- (2) 临床技能(Clinical Skill, CS): 要通过Step 1、Step 2及 TOEFL 之后才能报考,主要是考查考生的临床实践操作知识。

Step 3 (第三阶段):测试考生的实际工作能力。内容包括采集病史、体格检查、诊断、治疗措施,以及医疗法规等。

USMLE在北京、上海和广州设有考点,在中国大陆可参加 USMLE Step 1 和 USMLE Step 2 CK 的考试。考试介绍及报名情况可 参见 http://www.ecfmg.com

为了帮助有志于参加 USMLE 的考生更好地复习, 北京大学医学出版社全面引进了 McGraw Hill 公司的两个著名 USMLE 复习品牌丛书: PreTest 系列、FIRST AID 系列。这两套丛书经过多次再版,受到世界各地考生的欢迎。本次引进的均为其最新版本。

当前,我国很多医学院校在进行英文授课、考试的改革,本书对国内从事英语授课、考试的教师和学生也有重要的参考价值。为广大的医学生和医务工作者比较中美医学教育和自己掌握的知识提供参考。同时,该书也是学习专业英语的好教材。

### Notice

Medicine is an ever-changing science. As new research and clinical experience broaden our knowledge, changes in treatment and drug therapy are required. The authors and the publisher of this work have checked with sources believed to be reliable in their efforts to provide information that is complete and generally in accord with the standards accepted at the time of publication. However, in view of the possibility of human error or changes in medical sciences, neither the authors nor the publisher nor any other party who has been involved in the preparation or publication of this work warrants that the information contained herein is in every respect accurate or complete, and they disclaim all responsibility for any errors or omissions or for the results obtained from use of the information contained in this work. Readers are encouraged to confirm the information contained herein with other sources. For example and in particular, readers are advised to check the product information sheet included in the package of each drug they plan to administer to be certain that the information contained in this work is accurate and that changes have not been made in the recommended dose or in the contraindications for administration. This recommendation is of particular importance in connection with new or infrequently used drugs.

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# Introduction

Medicine: PreTest Self-Assessment and Review, 13th Edition, is intended to provide medical students, as well as house officers and physicians, with a convenient tool for assessing and improving their knowledge of medicine.

The 500 questions in this book are similar in format and complexity to those included in Step 2 of the United States Medical Licensing Examination (USMLE). They may also be a useful study tool for Step 3 and for the National Board of Medical Examiners (NBME) medical student exam for the internal medicine clerkship.

For multiple-choice questions, the **one best** response to each question should be selected. For matching sets, a group of questions will be preceded by a list of lettered options. For each question in the matching set, select **one** lettered option that is **most** closely associated with the question.

Each question in this book has a corresponding answer, a reference to a text that provides background to the answer, and a short discussion of various issues raised by the question and its answer. A listing of references for the entire book follows the last chapter.

To simulate the time constraints imposed by the qualifying examinations for which this book is intended as a practice guide, the student or physician should allot about one minute for each question. After answering all questions in a chapter, as much time as necessary should be spent in reviewing the explanations for each question at the end of the chapter.

Attention should be given to all explanations, even if the examinee answered the question correctly. Those seeking more information on a subject should refer to the reference materials listed or to other standard texts in medicine.

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# Infectious Disease

# Questions

- **I.** A 30-year-old male patient complains of fever and sore throat for several days. The patient presents to you today with additional complaints of hoarseness, difficulty breathing, and drooling. On examination, the patient is febrile and has inspiratory stridor. Which of the following is the best course of action?
- a. Begin outpatient treatment with ampicillin.
- b. Culture throat for β-hemolytic streptococci.
- c. Admit to intensive care unit and obtain otolaryngology consultation.
- d. Schedule for chest x-ray.
- e. Obtain Epstein-Barr serology.
- **2.** A 70-year-old patient with long-standing type 2 diabetes mellitus presents with complaints of pain in the left ear with purulent drainage. On physical examination, the patient is afebrile. The pinna of the left ear is tender, and the external auditory canal is swollen and edematous. The white blood cell count is normal. Which of the following organisms is most likely to grow from the purulent drainage?
- a. Pseudomonas aeruginosa
- b. Streptococcus pneumoniae
- c. Candida albicans
- d. Haemophilus influenzae
- e. Moraxella catarrhalis

3. A 25-year-old male student presents with the chief complaint of rash. He denies headache, fever, or myalgia. A slightly pruritic maculopapular rash is noted over the abdomen, trunk, palms of the hands, and soles of the feet. Inguinal, occipital, and cervical lymphadenopathy is also noted. Hypertrophic, flat, wartlike lesions are noted around the anal area. Laboratory studies show the following:

Hct: 40% Hgb: 14 g/dL WBC: 13,000/μL

Diff: 50% segmented neutrophils, 50% lymphocytes

Which of the following is the most useful laboratory test in this patient?

- a. Human papillomavirus (HPV) serology
- b. Venereal Disease Research Laboratory (VDRL) test
- c. Nucleic acid amplification test for Chlamydia
- d. Blood cultures
- e. Biopsy of perianal lesions
- 4. A 35-year-old previously healthy man develops cough with purulent sputum over several days. On presentation to the emergency room, he is lethargic. Temperature is 39°C, pulse 110, and blood pressure 100/70. He has rales and dullness to percussion at the left base. There is no rash. Flexion of the patient's neck when supine results in spontaneous flexion of hip and knee. Neurologic examination is otherwise normal. There is no papilledema. A lumbar puncture is performed in the emergency room. The cerebrospinal fluid (CSF) shows 8000 leukocytes/µL, 90% of which are polys. Glucose is 30 mg/dL with a peripheral glucose of 80 mg/dL. CSF protein is elevated to 200 mg/dL. CSF Gram stain is pending. Which of the following is the correct treatment option?
- a. Begin acyclovir for herpes simplex encephalitis.
- b. Obtain emergency MRI scan before beginning treatment.
- c. Begin ceftriaxone and vancomycin for pneumococcal meningitis.
- d. Begin ceftriaxone, vancomycin, and ampicillin to cover both pneumococci and Listeria.
- e. Begin high-dose penicillin for meningococcal meningitis.

- **5.** A 29-year-old man presents with a 4-day history of fever, headache with retro-orbital pain, severe musculoskeletal and lumbar back pain and rash. The symptoms began 3 days after he returned from a 2-week vacation to the Caribbean islands. The rash developed on his face before spreading over his trunk and extremities. The patient reports receiving appropriate vaccination, including hepatitis A virus vaccine, hepatitis B virus vaccine, and typhoid vaccine. Laboratory tests reveal normal kidney and liver function tests but leukopenia and thrombocytopenia. Which of the following organisms is the most likely cause of this infection?
- a. Leptospira
- b. Plasmodium falciparum
- c. Salmonella typhi
- d. Dengue virus
- e. Hepatitis A virus
- **6.** A 22-year-old male patient, recently incarcerated and now homeless, has received 1 week of clarithromycin for low-grade fever and left upperlobe pneumonia. He has not improved on antibiotics, with persistent cough productive of purulent sputum and flecks of blood. Repeat chest x-ray suggests a small cavity in the left upper lobe. Which of the following statements is correct?
- a. The patient has anaerobic infection and needs outpatient clindamycin therapy.
- b. Sputum for acid fast bacilli stain and culture is required.
- c. The patient requires glove and gown contact precautions.
- d. Isoniazid to treat latent tuberculosis should be started if PPD is positive.
- e. Interferon-gamma release assay should be ordered.

**7.** A 19-year-old male patient presents with a 1-week history of malaise and anorexia followed by fever and sore throat. On physical examination, the throat is inflamed without exudate. There are a few palatal petechiae. Cervical adenopathy is present. The liver span is 12 cm and the spleen is palpable.

Throat culture: negative for group A streptococci

Hgb: 12.5, Hct: 38% Reticulocytes: 4% WBC: 14,000/µL Segmented: 30% Lymphocytes: 60% Monocytes: 10%

Bilirubin total: 2.0 mg/dL (normal 0.2-1.2)

Lactic dehydrogenase (LDH) serum: 260 IU/L (normal 20-220) Aspartate aminotransferase (AST): 60 U/L (normal 8-40 U/L) Alanine aminotransferase (ALT): 55 U/L (normal 8-40 U/L)

Alkaline phosphatase: 40 IU/L (normal 35-125)

Which of the following is the most important initial test combination to order?

- a. Liver biopsy and hepatitis antibody
- b. Streptococcal screen and antistreptolysin O (ASO) titer
- c. Peripheral blood smear and heterophile antibody
- d. Toxoplasma IgG and stool sample
- e. Lymph node biopsy and cytomegalovirus serology
- **8.** A 30-year-old man presents with right upper quadrant pain. He has been well except for an episode of diarrhea that occurred 4 months ago, just after he returned from a missionary trip to Mexico. He has lost 7 lb. He is not having diarrhea. His blood pressure is 140/70, pulse 80, and temperature 37.5°C (99.5°F). On physical examination there is right upper-quadrant tenderness without rebound. There is some radiation of the pain to the shoulder. The liver is percussed at 14 cm. There is no lower quadrant tenderness. Bowel sounds are normal and active. Which of the following is the most appropriate next step in evaluation of the patient?
- a. Serology and ultrasound
- b. Stool for ova and parasite
- c. Blood cultures
- d. Diagnostic aspirate
- e. Empiric broad-spectrum antibiotic therapy

**9.** An 80-year-old female patient complains of a 3-day history of a painful rash extending over the right half of her forehead and down to her right eyelid. There are weeping vesicular lesions on physical examination. Which of the following is the most likely diagnosis?



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- a. Impetigo
- b. Adult chickenpox
- c. Herpes zoster
- d. Coxsackie A virus
- e. Herpes simplex

- 10. A 28-year-old woman presents to her internist with a 2-day history of low-grade fever and lower abdominal pain. She denies nausea, vomiting, or diarrhea. On physical examination, there is temperature of  $38.3^{\circ}$ C (100.9°F) and bilateral lower quadrant tenderness, without point or rebound tenderness. Bowel sounds are normal. On pelvic examination, an exudate is present and there is tenderness on motion of the cervix. Her white blood cell count is  $15,000/\mu L$  and urinalysis shows no red or white blood cells. Serum  $\beta$ -hCG is undetectable. Which of the following is the best next step in management?
- a. Treatment with ceftriaxone and doxycycline
- b. Treatment with ciprofloxacin and metronidazole
- c. Diagnostic laparoscopy
- d. CT scan of abdomen and pelvis
- e. Aztreonam
- **11.** A 35-year-old man complains of inability to close his right eye. Examination shows facial nerve weakness of the upper and lower halves of the face. There are no other cranial nerve abnormalities, and the rest of the neurological examination is normal. The patient is afebrile. Examinations of the heart, chest, abdomen, and skin show no additional abnormalities. There is no lymphadenopathy. About 1 month ago the patient was seen by a dermatologist for a bull's-eye skin rash 2 weeks after returning from a camping trip in upstate New York. Which of the following is the most likely diagnosis?
- a. Sarcoidosis
- b. Idiopathic Bell palsy
- c. Lyme disease
- d. Syphilis
- e. Lacunar infarct