

*National Boards
Examination Review*

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For Part II

CLINICAL SCIENCES

ROBERT E. PIERONI, M.D.



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notice

The author and the publisher of this book have made every effort
to ensure that all therapeutic modalities that are recommended
are in accordance with accepted standards at the time of
publication.

The drugs specified within this book may not have specific
approval by the Food and Drug Administration in regard to the
indications and dosages that are recommended by the author.
The manufacturer's package insert is the best source of current
prescribing information.

To my family for their strong support, and to the students and residents of the College of Community Health Sciences who made the effort enjoyable and worthwhile.

Preface

This volume offers a comprehensive review of the clinical sciences in question-and-answer form. It is specifically designed to assist medical students studying for National Boards Part II and the Medical Sciences Knowledge Profile examination (MSKP). It may also be a useful adjunct to preparation for the clinical science component of other standardized objective examinations, including the Federation Licensing Examination (FLEX), the Educational Commission on Foreign Medical Graduates examination (ECFMG), and the Visa Qualifying Examination (VQE).

It includes a total of 925 multiple choice questions with referenced explanatory answers, of which 167 are devoted to medicine, 154 to psychiatry and surgery, 135 to public health and preventive medicine, 170 to pediatrics and 145 to obstetrics/gynecology. The topics covered reflect the content outline of the National Board of Medical Examiners. The questions have been modeled after those used on Boards and are arranged by type within each subject section to provide good practice in dealing with various testing formats. Answers, with explanatory comments and references, are conveniently placed at the end of the section containing the corresponding questions. The reference list for each section appears after the answers. This edition incorporates 110 illustrations as bases for questions to help sharpen skills in graphic interpretation.

Using this book, you may identify areas of relative strength and weakness in your command of the constituent disciplines. Specific references to widely used textbooks allow you to return to authoritative sources for further study. The explanatory comments accompanying each answer are intended to prompt thought about the choices—correct and incorrect—to put the responses in broadened perspective, and to add to your fund of knowledge. In composite, the material in this book emphasizes problem solving and application of underlying principles in addition to factual recall.

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disclaimer

The author has made every effort to thoroughly verify the answers to the questions which appear on the following pages. However, as in any text, some inaccuracies and ambiguities may occur; therefore, if in doubt, please consult your references.

The Publisher

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I: Medicine

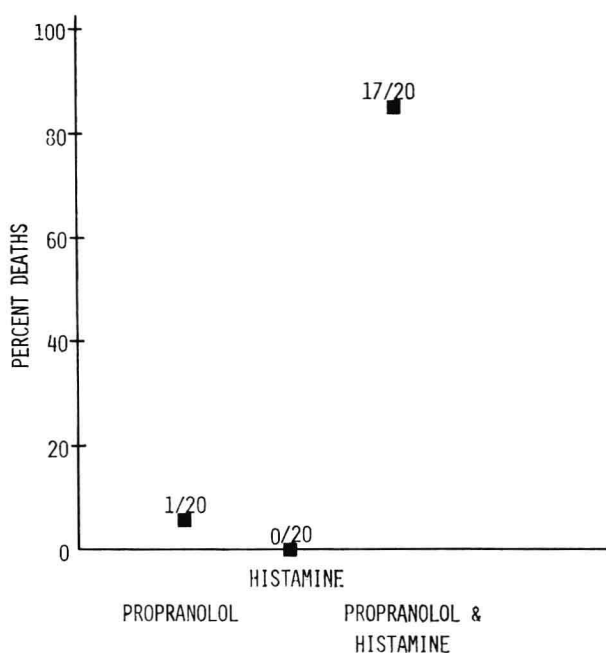
DIRECTIONS: Each of the questions or incomplete statements below is followed by suggested answers or completions. Select the **one** that is **BEST** in each case.

1. A 77-year-old female with a history of ASCVD and mild, compensated congestive heart failure for which she is receiving digoxin complains of occasional “skipped heart beats.” Cardiac auscultation and an initial EKG revealed no ectopic beats. The physician decided to monitor the patient’s rhythm for 24 hours. Figure 1.1 was obtained while the patient was sleeping. Which of the following procedures was used to obtain the tracing?
 - A. Holter monitoring
 - B. Lown monitoring
 - C. Marriott monitoring
 - D. Wolff monitoring
 - E. None of the above



Figure 1.1

2. The monitored strip in this patient shows which of the following?
 - A. Wenckebach phenomenon
 - B. Mobitz type II AV block
 - C. Complete heart block
 - D. Parasystole
 - E. None of the above
3. Which of the following would be most useful in the patient described?
 - A. Starting propranolol
 - B. Implanting a temporary pacemaker
 - C. Implanting a permanent pacemaker
 - D. Obtaining a digoxin level
 - E. Starting quinidine
4. A sexually active 18-year-old male complains of a painful urethral discharge. After appropriate studies a diagnosis of gonorrhea is made. Which of the following would be most likely to be found on a smear of his discharge?
 - A. Gram-positive rods
 - B. Gram-negative rods
 - C. Gram-positive cocci
 - D. Gram-negative cocci
 - E. None of the above
5. Figure 1.2 represents an experimental study in which groups of 20 mice were injected with propranolol alone, histamine alone, and propranolol followed by histamine. Which of the following is demonstrated by this figure?
 - A. Tachyphylaxis
 - B. An additive effect
 - C. Synergistic toxicity
 - D. The effect of an alpha agonist on a vasoactive amine
 - E. The effect of a beta agonist on a vasoactive amine

**Figure 1.2**

6. The sensitizing effect of propranolol is most probably mediated through
- A. blockade of alpha receptors of the autonomic nervous system
 - B. blockade of beta receptors of the autonomic nervous system
 - C. blockade of alpha receptors of the central nervous system
 - D. blockade of beta receptors of the central nervous system
 - E. none of the above

7. Extrapolating these results to humans one would be most cautious in using propranolol in subjects with which of the following?
 - A. Tachycardia
 - B. Asthma
 - C. Prolapsed mitral valve
 - D. Asymmetric septal hypertrophy
 - E. None of the above
8. Because of its effects as a beta-blocker, caution would also be indicated in using propranolol in subjects with all of the following EXCEPT
 - A. congestive heart failure
 - B. heart block (AV node)
 - C. diabetes mellitus
 - D. bradycardia
 - E. hypertension
9. The 34-year-old male with the X-ray shown in Figure 1.3 is noted on physical examination to have jugular vein distention, ascites, and peripheral edema. A paradoxical pulse was also noted. The most likely diagnosis is
 - A. congestive heart failure
 - B. pericardial effusion
 - C. nephrotic syndrome
 - D. cirrhosis
 - E. myocardial infarction

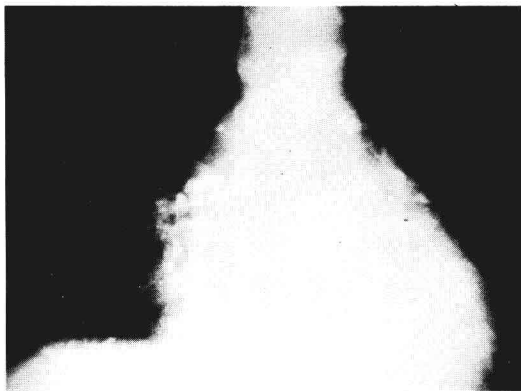


Figure 1.3

10. In patients who develop constrictive pericarditis, which of the following would be LEAST likely to be found on the EKG?
 - A. Sinus tachycardia
 - B. ST changes
 - C. T wave changes
 - D. Atrial fibrillation
 - E. High voltage

11. Which of the following is the most common cause of constrictive pericarditis?
 - A. Trauma
 - B. Uremia
 - C. Tuberculosis
 - D. Idiopathic
 - E. Connective tissue disease

12. Biopsy of a chest infiltrate in a 63-year-old male reveals the presence of blastomycosis. Which of the following medications would be most likely to be indicated?
 - A. Penicillin
 - B. Amphotericin B
 - C. Tetracycline
 - D. Tobramycin
 - E. Chloramphenicol

13. During the course of therapy the patient's rhythm becomes irregular. An EKG reveals multiple PVCs. Which of the following is the most likely explanation?
 - A. Hypercalcemia
 - B. Hypocalcemia
 - C. Hyperkalemia
 - D. Hypokalemia
 - E. Hyperphosphatemia

14. A 52-year-old female had been placed on dipyridamole, 50 mg PO t.i.d., for chronic angina pectoris. She also was taking nitroglycerin. The patient returned to the physician because of wheezing which he substantiated on physical examination. The newly developed bronchial asthma was most likely due to
- A. development of left-sided heart failure
 - B. development of right-sided heart failure
 - C. tartrazine sensitivity
 - D. synergism of dipyridamole with nitroglycerin
 - E. none of the above
15. A 48-year-old female has had several episodes of vaginal moniliosis. Of the following diseases, which is the patient most likely to have?
- A. Diabetes mellitus
 - B. Tuberculosis
 - C. Sarcoidosis
 - D. Rheumatoid arthritis
 - E. Lupus erythematosus
16. A 42-year-old severely depressed female was found unconscious with an empty bottle of propoxyphene hydrochloride (Darvon) at her side. She was promptly taken to the emergency room where she was noted to be comatose. Which of the following would LEAST likely to be found in this patient?
- A. Respiratory depression
 - B. Circulation collapse
 - C. Mydriasis
 - D. Convulsions
 - E. Cardiac arrhythmias

17. After a patent airway has been ensured and artificial respiration instituted, which of the following would be most helpful in treating the patient's respiratory depression?
 - A. Physostigmine
 - B. Naloxone
 - C. Atropine
 - D. Propranolol
 - E. None of the above

18. A 64-year-old chronic alcoholic is diagnosed as having Wernicke-Korsakoff syndrome. His main nutritional deficiency is
 - A. riboflavin
 - B. thiamine
 - C. pyridoxine
 - D. vitamin B₁₂
 - E. nicotinic acid

19. Figure 1.4 was obtained in a 62-year-old male during a routine physical examination. Which of the following is present on the tracing?
- A. An inferior myocardial infarction
 - B. A true posterior myocardial infarction
 - C. Counterclockwise rotation
 - D. Left anterior hemiblock
 - E. None of the above
20. The patient's electrical axis is approximately
- A. -60°
 - B. -30°
 - C. 0°
 - D. $+50^{\circ}$
 - E. $+90^{\circ}$
21. A 46-year-old female with long-standing rheumatoid arthritis is started on cryotherapy. Which of the following toxic reactions is the patient most likely to experience?
- A. Nausea and vomiting
 - B. Agranulocytosis
 - C. Dermatitis and stomatitis
 - D. Thrombophlebitis
 - E. Alopecia
22. A 24-year-old male developed hypotension and jugular venous distention. On chest X-ray his heart was noted to be larger than it had been on a previous chest X-ray which had been obtained because of contact with a patient with tuberculosis. Heart sounds were distant. An arterial pulsus paradoxus of 14 mm Hg was noted. The most likely diagnosis is
- A. gram-negative septicemia
 - B. TB septicemia
 - C. cardiac tamponade
 - D. amyloidosis
 - E. hemorrhagic pericarditis

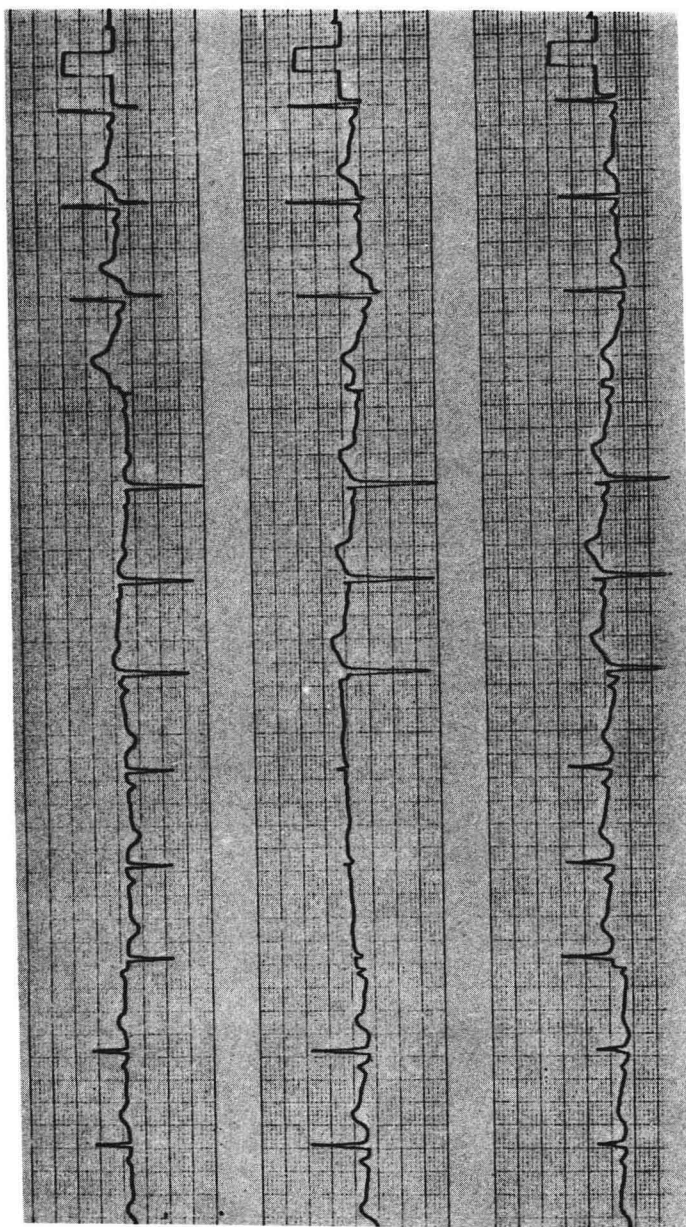


Figure 1.4