

**MEDICAL  
EXAMINATION  
REVIEW**

**Volume 22**

**Gastroenterology**

**Fourth Edition**

**700** MULTIPLE CHOICE QUESTIONS AND  
REFERENCED EXPLANATORY ANSWERS

**Lawrence D. Wruble, M.D.  
Myron Lewis, M.D.  
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# Gastroenterology

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Lawrence D. Wruble, M.D.  
*Clinical Professor of Medicine*

Myron Lewis, M.D.  
*Clinical Associate Professor of Medicine*

Michael Levinson, M.D.  
*Clinical Assistant Professor of Medicine*

*Examination*  
University of Tennessee  
*ditions* Center for the Health Sciences  
Memphis, Tennessee



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# Preface

This gastroenterology review book was inspired by our patients and housestaff who have constantly raised questions in our own minds and who have served as a stimulus for us to search the literature to obtain in-depth information. The format of this text is such that questions are asked which will hopefully stimulate the reader to not only answer the questions but to seek the basis of the answers in the literature quoted. Each question is answered with a brief explanation, but of course there is no substitute for reading the original article.

This is not meant to be a shortcut to learning, as there are no shortcuts, but an enjoyable way to learn and to review. Hopefully, individuals preparing for their subspecialty examinations, specifically gastroenterology, will find the format and information helpful.

We would like to dedicate this book to our families, who have put up with our late hours and our studies, reviewing various articles and literature, in order to prepare this book which we have enjoyed producing and hope that the readers will enjoy reading.

## notice

The authors 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 authors. The manufacturer's package insert is the best source of current prescribing information.

# Contents

PREFACE	v
QUESTIONS	1
REFERENCES	138
EXPLANATORY ANSWERS	145

## GASTROENTEROLOGY

1. Gastrin is a hormone which is secreted predominantly by the
  - A. gastric antrum
  - B. gastric fundus
  - C. duodenum
  - D. Brunner's glands
  - E. pancreasREF. 28 - p. 1
  
2. Transportation of a bolus of food through the esophagus is the function of
  - A. the primary peristaltic wave
  - B. the secondary peristaltic wave
  - C. the tertiary peristaltic wave
  - D. A and B only
  - E. all three types of wavesREF. 1 - p. 121
  
3. Diffuse esophageal spasm
  - A. does not exist
  - B. is not found in persons under 50
  - C. is manifested by substernal chest pain through to the back
  - D. always requires surgery
  - E. never presents as dysphagiaREF. 66 - p. 533

4. Nonocclusive mesenteric vascular disease is a frequently overlooked entity and until recently had a dismal prognosis. Which agent or agents have been shown to be of use in this illness?

- A. Digitalis
- B. Papaverine
- C. Hydrochlorothiazide
- D. Prostaglandin E
- E. Phenoxybenzamine

REF. 67 - p. 851

5. In hemorrhagic shock the intestinal vasculature responds by which of the following?

- A. Resistance to blood flow through the gut wall is elevated
- B. Blood flow is redistributed away from the mucosa
- C. Capillary filtration is decreased
- D. The intestinal countercurrent mechanisms shunts O<sub>2</sub> toward the villous tips
- E. Intestinal vasoconstriction evoked by hemorrhage has been revised by glucagon

REF. 67 - p. 851

6. Phases of gastric acid secretion include

- A. gastric phase
- B. cephalic phase
- C. intestinal phase
- D. none of the above
- E. all of the above

REF. 66 - p. 153

7. A recent review of liver blood flow found all of the following to be true EXCEPT

- A. increase in blood flow through the hepatic artery leads to an inflow resistance in the portal circulation
- B. increase in blood flow through the hepatic artery leads to decrease in resistance in the portal circulation
- C. hypocapnia and the resulting alkalosis cause reduction in hepatic arterial and portal venous blood flows
- D. total liver blood flow increases after eating
- E. hydrodynamic interaction between hepatic artery and the portal vein accounts for a partial reciprocity of blood flow between the two circuits which may be important in determining the overall hepatic vascular response to an extrinsic regulatory mechanism

REF. 107 - p. 159

8. The major components of intestinal gas are

- A.  $N_2$
- B.  $O_2$
- C.  $CO_2$
- D. methane
- E.  $H_2S$

REF. 66 - p. 387

9. It is critical to understand drug interactions. An extremely important one was recently studied. The only FALSE statement concerning this interaction is

- A. cimetidine, acute therapy, reduced liver blood flow by 25% in fasting patients
- B. chronic cimetidine therapy reduced liver blood flow by 33%
- C. cimetidine inhibited the metabolism of oral propranolol
- D. inhibition of drug metabolism is dose-related
- E. cimetidine alone causes an effect on atrial  $H_2$  receptor causing tachycardia

REF. 113 - p. 642

10. The following are maximally absorbed in the duodenum

- A.  $Ca^{++}$  (calcium)
- B.  $Fe^{++}$  (iron)
- C. vitamin  $B_{12}$
- D. folates
- E. bile salts

REF. 66 - p. 251

11. The following drugs may interfere with digestion and/or absorption

- A. cholestyramine
- B. cathartics
- C. colchicine
- D. neomycin
- E. all of the above

REF. 66 - p. 292

12. If oral mannitol is used for bowel preparation before colonoscopic polypectomy, the following precautions are necessary

- A. none
- B. oral antibiotics
- C. insufflation with  $CO_2$
- D. IV diazepam
- E. cardiac monitor

REF. 107 - p. 1

Match the following headings with the proper descriptive statement

- A. Serum gastrin elevated
- B. Serum gastrin normal
- C. Serum gastrin decreased

13. Patients with hypochlorhydria or achlorhydria

14. Zollinger-Ellison syndrome

15. After meals

16. Pyloric obstruction

17. Early morning before breakfast

REF. 66 - p. 120

18. Prominent veins across the upper abdomen whose direction of flow is toward the pelvis suggests

- A. portal hypertension
- B. inferior vena caval obstruction
- C. superior vena caval obstruction
- D. thrombosis at the bifurcation of the iliac veins
- E. hepatic vein thrombosis

REF. 1 - p. 79

19. Radiologically, esophageal webs are usually located by what views?

- A. Posterior
- B. Oblique
- C. Lateral
- D. None of the above

REF. 66 - p. 569

20. The only intra-abdominal organ that does not move with respiration is

- A. kidney
- B. pancreas
- C. spleen
- D. transverse colon
- E. stomach

REF. 1 - p. 118

21. The hepatorenal syndrome in the end stage alcoholic cirrhotic has grave consequences. Which of the following are true?

- A. It occurs in chronic liver disease with ascites
- B. It is usually of slow onset
- C. Urine to plasma osmolarity  $>1.0$
- D. Urine sodium concentration  $<10$
- E. All of the above

REF. 5 - p. 129

22. The lower esophageal ring (Schatzki ring) is  
 A. a normal part of esophageal anatomy  
 B. a cause of dysphagia  
 C. always associated with iron deficiency anemia  
 D. a complication of vagotomy  
 REF. 1 - p. 119
23. Asterixis, the "flapping" tremor, is the peripheral manifestation of a central nervous system abnormality. Although characteristic of portal systemic encephalopathy, it is not diagnostic. It is also seen in  
 A. respiratory failure  
 B. uremia  
 C. hypoglycemia  
 D. barbiturate intoxication  
 E. severe congestive heart failure  
 REF. 4 - p. 861
24. Ocular complications of ulcerative colitis include  
 A. scleromalacia perforans  
 B. uveitis  
 C. conjunctivitis  
 D. episcleritis  
 E. optic neuritis  
 REF. 107 - p. 153
25. Evaluation of gastric ulcers includes  
 A. x-rays  
 B. gastroscopy  
 C. gastric biopsy  
 D. gastric cytology  
 E. routine arteriograms  
 REF. 66 - p. 660

Match the following headings with the proper descriptive statement

- A. PAO, peak acid output  
 B. MAO, maximal acid output  
 C. Both  
 D. Neither
26. Sum of four highest 15-min acid output produced by a stimulant above which acid secretion is not greater  
 27. Sum of two highest 10- or 15-min period of acid secretion  
 28. Can be converted into mEq/hr by multiplying by 3 or 2, depending on time period  
 REF. 66 - p. 644

29. Hyperamylasemia may also be caused by  
A. administration of morphine  
B. perforation of a peptic ulcer  
C. infraction of small intestine  
D. mumps  
E. ectopic pregnancy  
REF. 31 - p. 5
30. Chronic idiopathic intestinal pseudoobstruction typically involves the  
A. stomach  
B. small bowel  
C. colon  
D. pancreas  
E. esophagus  
REF. 79 - p. 107
31. Some common sequelae of inflammatory disease of the pancreas include  
A. hypocalcemia  
B. hypoglycemia  
C. abscesses  
D. pseudocyst formation  
E. all of the above  
REF. 79 - p. 134
32. In hepatocellular disease, which clotting factor usually retains its activity?  
A. II  
B. V  
C. VII  
D. VIII  
E. IX  
REF. 32 - p. 108
33. The best single test for the diagnosis of cystic fibrosis is  
A. serum amylase  
B. sweat test for  $\text{Na}^+$  and  $\text{Cl}^-$   
C. fecal fat  
D. serum lipase  
E. urine amylase  
REF. 66 - p. 1480

34. Criteria suggestive of an incomplete vagotomy include
- A. decrease in volume of gastric secretion after insulin
  - B. BAO equal to or greater than 2 mEq/hr
  - C. total acid output in excess of 2 mEq/hr in any post-insulin hour
  - D. gastric acid concentration elevated by 20 mEq/L
  - E. all of the above
- REF. 66 - p. 976
35. Menetrier's disease classically represents
- A. large gastric folds
  - B. hypoproteinemia
  - C. elevated acids
  - D. edema
  - E. all of the above
- REF. 66 - p. 740
36. The most common chronic GI disorder in the civilized countries is
- A. duodenal ulcer
  - B. diverticulitis
  - C. carcinoma of the colon
  - D. irritable colon syndrome
  - E. reflux esophagitis
- REF. 66 - p. 1585
37. Acute peptic ulcer disease is rarely found in
- A. hypothyroidism
  - B. cirrhosis
  - C. polycythemia vera
  - D. Cushing's syndrome
  - E. pregnancy
- REF. 1 - p. 591
38. Which of the following foodstuffs has the greatest acid secretory effect?
- A. Protein
  - B. Fat
  - C. Carbohydrate
- REF. 1 - p. 586
39. Which of the following are features of the milk-alkali syndrome?
- A. Hypercalcemia
  - B. Hypercalciuria
  - C. Hypophosphatemia
  - D. Increased alkaline phosphatase
  - E. Azotemia
- REF. 1 - p. 687

40. Which of the following found in hyperparathyroidism helps to differentiate it from milk-alkali syndrome?  
A. Hypercalcemia  
B. Hypercalciuria  
C. Azotemia  
D. Hyperphosphatasemia  
REF. 1 - p. 687
41. A high-folate diet would include  
A. various nuts  
B. vegetables  
C. corn  
D. milk  
E. liver  
REF. 34 - p. 449
42. Some of the common findings in acute peptic ulcer perforation consist of  
A. fever  
B. vomiting  
C. shoulder pain  
D. abdominal pain  
E. hyperperistalsis  
REF. 1 - p. 725
43. GI manifestations of a pheochromocytoma include  
A. nausea and vomiting  
B. abdominal pain  
C. diarrhea  
D. GI bleeding  
E. all of the above  
REF. 35 - p. 581
44. Marked elevations of serum amylase (fivefold) almost invariably signify the presence of  
A. parotitis  
B. pancreatitis  
C. intestinal obstruction  
D. carcinoma of the pancreas  
E. penetrating ulcer  
REF. 1 - p. 743
45. Macroamylasemia has been associated with  
A. intestinal malabsorption  
B. acute intermittent porphyria  
C. normal urinary amylase  
D. all of the above  
E. none of the above  
REF. 36 - p. 903

46. With amebic abscesses of the liver  
A. serological tests are unreliable  
B. aspiration is of therapeutic value  
C. surgical drainage is advisable  
D. secondary bacterial infection is present in 10-15% of cases  
E. none of the above  
REF. 36 - p. 952
47. All patients considered to have inflammatory bowel disease should have the following blood tests  
A. FANA  
B. hemagglutination tests for amebiasis  
C. Australia antibody  
D. heterophile  
E. FTA-ABS  
REF. 80 - p. 262
48. Which of the following liver complications have been associated with renal transplants?  
A. Hepatitis A  
B. Hepatitis B  
C. Cytomegalic disease  
D. Drug-induced liver disease  
E. All of the above  
REF. 94 - p. 72
49. Indications for upper GI endoscopy include  
A. dysphagia  
B. nausea  
C. negative x-rays and ulcer symptoms  
D. odynophagia  
E. none of the above  
REF. 109 - p. 1
50. Which of the following suggest the possibility of ulcer penetration?  
A. Supervention of night pain  
B. Diminished response to antacids  
C. Back pain  
D. Increase in pain intensity  
E. Change in the rhythmic pattern of ulcer pain  
REF. 1 - p. 741

51. The incidence of endoscopically verified stress ulceration in acutely traumatized patients is  
A. 10%  
B. 30%  
C. 60%  
D. 80%  
E. almost 100%  
REF. 82 - p. 1041
52. A significant finding in gastric outlet obstruction is  
A. bilious vomiting  
B. abdominal bruit  
C. resonance over Traube's space  
D. succussion splash  
E. visible peristalsis  
REF. 1 - p. 748
53. Derangement of body fluid and electrolytes characteristic of gastric outlet obstruction are  
A.  $\text{HCO}_2$  18 mEq/L; K 4-5 mEq/L; Cl 101 mEq/L; Na 135 mEq/L  
B.  $\text{HCO}_3$  10 mEq/L; K 2.5 mEq/L; Cl 112 mEq/L; Na 140 mEq/L  
C.  $\text{HCO}_3$  35 mEq/L; Cl 105 mEq/L; K 3.0 mEq/L; Na 140 mEq/L  
D.  $\text{HCO}_3$  37 mEq/L; Cl 71 mEq/L; K 2.8 mEq/L; Na 135 mEq/L  
E.  $\text{HCO}_3$  27 mEq/L; Cl 101 mEq/L; K 4.0 mEq/L; Na 140 mEq/L  
REF. 1 - p. 749
54. Bilocular or hourglass stomach is usually caused by  
A. syphilis  
B. lymphoma  
C. gastric ulcer  
D. congenital abnormality  
E. paraesophageal hiatal hernia  
REF. 1 - p. 757
55. Anatomically, the most common site for a subdiaphragmatic abscess is the  
A. right posterior suprahepatic space  
B. left posterior infrahepatic space  
C. right anterior suprahepatic space  
D. left anterior infrahepatic space  
E. right infrahepatic space  
REF. 1 - p. 606

56. The following diseases may be associated with elevated serum alkaline phosphatase
- A. pyelonephritis
  - B. Paget's disease
  - C. subacute thyroiditis
  - D. liver disease
  - E. all of the above
- REF. 83 - p. 505
57. Which of the following symptoms are common accompaniments of subdiaphragmatic abscess?
- A. Fever
  - B. Dyspnea
  - C. Cough
  - D. Hiccups
  - E. Pain
- REF. 1 - p. 607
58. Which of the following physical signs are found in patients with subdiaphragmatic abscess?
- A. Elevated, fixed hemidiaphragm
  - B. Smooth, sharp liver edge beneath the costal margins
  - C. Hepatic tenderness
  - D. Resonance over the liver
  - E. Diminished breath sounds at the right lung base
- REF. 1 - p. 607
59. Smallest amount of blood that can cause melena is stated to be
- A. 25 ml
  - B. 60 ml
  - C. 100 ml
  - D. 250 ml
  - E. 500 ml
- REF. 1 - p. 765
60. Melena may be simulated by alterations in the color of feces following the ingestion of which of the following agents?
- A. Iron
  - B. Aluminum hydroxide
  - C. Charcoal
  - D. Bismuth
  - E. Psyllium seed
- REF. 1 - p. 765