

Hagen: Textbook of Diagnostic Sonography, 7th Edition

Chapter 02: Introduction to Physical Findings, Physiology, and Laboratory Data

Test Bank

MULTIPLE CHOICE

1. An example of subjective data in a health history is:
 - a. The physician notes bruising on the middle back.
 - b. The patient states he has back pain.
 - c. X-ray examinations show calcification in the pancreatic area.
 - d. Magnetic resonance imaging shows calcification in the pancreas.

ANS: B

Subjective data (i.e., data that cannot be seen and verified by someone other than the patient) are derived from the patient alone.

PTS: 1 REF: p. 21

OBJ: Explain how to interview a patient, obtain a health history, and perform a physical assessment.

TOP: Patient assessment

2. Which one of the following statements is inappropriate for the patient interview process?
 - a. Assure the patient that the information will be confidential.
 - b. Be sure the patient understands English.
 - c. Explain how the patient will receive information about the results of the examination.
 - d. Always use the patient's first name to establish a friendly relationship.

ANS: D

Always address the patient respectfully using a formal name.

PTS: 1 REF: p. 22

OBJ: Explain how to interview a patient, obtain a health history, and perform a physical assessment.

TOP: Patient assessment

3. Which one of the following statements is *false* in the guidelines for gastrointestinal assessment?
 - a. Fever may be sign of infection.
 - b. Bradycardia may occur with shock.
 - c. Respiratory rate increases with shock.
 - d. Decreased blood pressure may result from shock, secondary to gastrointestinal bleed.

ANS: B

Tachycardia may occur with shock.

PTS: 1 REF: p. 25

OBJ: Explain how to interview a patient, obtain a health history, and perform a physical assessment.

TOP: Patient assessment

4. The signs and symptoms for appendicitis include all of the following *except*:
- Abdominal pain
 - McBurney sign
 - Nausea and vomiting
 - Bright rectal bleeding

ANS: D

Bright rectal bleeding is a possible indication of colon cancer, not appendicitis.

PTS: 1 REF: p. 26

OBJ: Recognize the clinical signs and symptoms of diseases discussed in this chapter.

TOP: Clinical signs and symptoms

5. Signs and symptoms for urinary tract obstruction include all of the following *except*:
- Dysuria
 - Urinary frequency and urgency
 - Hematuria
 - Sensation of bloating or fullness in the lower abdomen

ANS: C

Hematuria may be a sign of cystitis, urinary tract infection, or bladder cancer.

PTS: 1 REF: p. 27

OBJ: Recognize the clinical signs and symptoms of diseases discussed in this chapter.

TOP: Clinical signs and symptoms

6. The signs and symptoms for hydrocele include all of the following *except*:
- Sudden and severe pain
 - Gradual scrotal swelling
 - Lack of pain
 - Nontender mass on palpitation

ANS: A

The sudden onset of severe pain may be an indication of testicular torsion, not a hydrocele.

PTS: 1 REF: p. 28

OBJ: Recognize the clinical signs and symptoms of diseases discussed in this chapter.

TOP: Clinical signs and symptoms

7. Bile pigment, old worn out blood cells, and materials from phagocytosis are removed by special hepatic cells called:
- Erythropoiesis
 - Kupffer
 - Thrombocytopenia
 - Sinusoids

ANS: B

Kupffer cells are special liver cells that remove bile pigment, old worn out blood cells, and materials for phagocytosis.

PTS: 1 REF: p. 30

OBJ: Recall the anatomy and physiology discussed in this chapter.

TOP: Anatomy and physiology

8. Hepatic jaundice may be the result of all the following *except*:
- Infections with hepatitis
 - Drugs
 - Tumor growth
 - Polycystic disease

ANS: D

Hepatic jaundice is caused by intrinsic disease. It may be the result of hepatitis, drugs, tumor growth, or injury from toxic agents.

PTS: 1 REF: p. 31

OBJ: Recognize the clinical signs and symptoms of diseases discussed in this chapter.

TOP: Clinical signs and symptoms

9. The enzyme that is released when fats and proteins reach the duodenum is:
- Cholecystokinin
 - Cholestasis
 - Choledochal
 - Cholesteremia

ANS: A

Cholecystokinin initiates gallbladder contraction, causing bile to enter the small bowel. It also increases liver secretions.

PTS: 1 REF: p. 31

OBJ: Recall the anatomy and physiology discussed in this chapter.

TOP: Anatomy and physiology

10. The first step of urine formation is:

- a. Nephron diffusion
- b. Glomerular filtration
- c. Albuminuria
- d. Homeostasis

ANS: B

Glomerular filtration is the first step in urine formation. The nephron complex takes place to maintain continual homeostasis of blood plasma.

PTS: 1 REF: p. 35

OBJ: Recall the anatomy and physiology discussed in this chapter.

TOP: Anatomy and physiology

11. Which one of the following is a carbohydrate enzyme?

- a. Glucose
- b. Amylase
- c. Fatty acid
- d. Lipase

ANS: B

Amylase is a carbohydrate enzyme that acts on starch and glycogen, producing sugar maltose.

PTS: 1 REF: p. 32

OBJ: Recall the anatomy and physiology discussed in this chapter.

TOP: Anatomy and physiology

12. Renal dysfunction will result in an elevation of _____.

- a. Albuminuria
- b. Blood urea nitrogen (BUN)
- c. Serum creatinine
- d. Specific gravity

ANS: C

Serum creatinine is more sensitive than BUN in determining renal impairment.

PTS: 1 REF: p. 34

OBJ: Be familiar with common laboratory tests and what their results may indicate.

TOP: Laboratory testing

13. The presence of hemoglobin in urine can cause _____.

- a. Increase of functioning erythrocytes
- b. Increase in albuminuria
- c. Nephritis

d. Acute renal failure

ANS: D

The presence of hemoglobin in urine occurs whenever extensive damage or the destruction of functioning erythrocytes has occurred.

PTS: 1 REF: p. 34

OBJ: Be familiar with common laboratory tests and what their results may indicate.

TOP: Laboratory testing

14. Fat enters the system in the form of all of the following *except*:

- a. Glycerol
- b. Fatty acids
- c. Glucose
- d. Cholesterol

ANS: C

Glucose consists chiefly of dextrose.

PTS: 1 REF: p. 31

OBJ: Recall the anatomy and physiology discussed in this chapter.

TOP: Anatomy and physiology

15. Which one of the following physical assessments is helpful in evaluating cardiac output?

- a. Pulse
- b. Body temperature
- c. Blood pressure
- d. Respiration

ANS: C

Systolic and diastolic blood pressures are helpful in evaluating cardiac output. Systole reflects the maximum pressure exerted on the arterial wall during peak left ventricular contraction. Diastole reflects the minimum pressure exerted on the arterial wall during left ventricular rest.

PTS: 1 REF: p. 23

OBJ: Recognize the clinical signs and symptoms of diseases discussed in this chapter.

TOP: Patient assessment

16. A type of solution that contains more hydrogen ions than hydroxyl ions is called a _____ solution.

- a. Buffer
- b. Acidic
- c. Base
- d. Alkaline

ANS: B

Acids contain more hydrogen ions than hydroxyl ions.

PTS: 1 REF: p. 29

OBJ: Be familiar with common laboratory tests and what their results may indicate.

TOP: Laboratory testing

17. Normal findings in a gastrointestinal assessment include all of the following *except*:

- a. Impalpable spleen
- b. Tympany
- c. Rigid abdominal musculature
- d. Venous hum over the inferior vena cava

ANS: C

A rigid abdomen may be a sign of appendicitis.

PTS: 1 REF: p. 26

OBJ: Recognize the clinical signs and symptoms of diseases discussed in this chapter.

TOP: Patient assessment

18. Uncontrolled hypertension may be related to _____.

- a. Liver dysfunction
- b. Urinary hesitancy
- c. Renal dysfunction
- d. Dysuria

ANS: C

Renals aid in regulating blood pressure. Uncontrolled hypertension may be indicative of renal dysfunction.

PTS: 1 REF: p. 25

OBJ: Recognize the clinical signs and symptoms of diseases discussed in this chapter.

TOP: Clinical signs and symptoms

19. Hematochezia may lead to _____.

- a. Hypervolemia
- b. Hypovolemia
- c. Leucopoiesis
- d. Polycythemia

ANS: B

A gastrointestinal bleed may lead to a decrease in blood volume (hypovolemia).

PTS: 1 REF: p. 25

OBJ: Recognize the clinical signs and symptoms of diseases discussed in this chapter.

TOP: Clinical signs and symptoms

20. In acute forms of hepatitis, an increase in the alanine transaminase (ALT) level may take _____ to reach normal levels.
- 2 to 3 days
 - 2 to 3 weeks
 - 2 to 3 months
 - 2 to 3 years

ANS: C

ALT falls slowly and reaches normal levels in 2 to 3 months.

PTS: 1 REF: p. 33

OBJ: Be familiar with common laboratory tests and what their results may indicate.

TOP: Laboratory testing

21. Which one of the following pancreatic function tests remains elevated the longest in abnormal disease?
- Serum lipase
 - Serum amylase
 - Urinary lipase
 - Urinary amylase

ANS: D

Urinary amylase remains higher in abnormal disease states than serum amylase.

PTS: 1 REF: p. 34

OBJ: Be familiar with common laboratory tests and what their results may indicate.

TOP: Laboratory testing

22. The specific gravity in urinary disease refers to the _____.
- Measurement of the kidney's ability to concentrate urine
 - Concentration of urea nitrogen in blood
 - Appearance of blood in urine
 - Measurement of renal dysfunction

ANS: A

A decrease in urine output increases the specific gravity.

PTS: 1 REF: p. 34

OBJ: Be familiar with common laboratory tests and what their results may indicate.

TOP: Laboratory testing

23. Which one of the following statements is *incorrect* about cholesterol?
- a. Cholesterol is found in the blood and all cells.
 - b. Hepatic disease may alter cholesterol metabolism.
 - c. Total cholesterol is decreased or normal in hepatitis or cirrhosis.
 - d. Total cholesterol is decreased in primary biliary cirrhosis.

ANS: D

Total cholesterol is increased in primary biliary cirrhosis and extrabiliary obstruction.

PTS: 1

REF: p. 31

OBJ: Recall the anatomy and physiology discussed in this chapter.

TOP: Anatomy and physiology

24. Which one of the following statements is *correct* about bilirubin?
- a. Bilirubin is derived from the breakdown of bile pigments.
 - b. A bilirubin test spots the increase before the onset of jaundice.
 - c. An extrahepatic obstruction demonstrates an increase in indirect bilirubin.
 - d. An increase in direct bilirubin indicates hemolysis.

ANS: B

A bilirubin test spots an increase before the onset of jaundice. Bilirubin is derived from the breakdown of hemoglobin in red blood cells. Extrahepatic obstruction demonstrates an increase in direct bilirubin. Hemolysis demonstrates an increase in indirect bilirubin.

PTS: 1

REF: p. 30

OBJ: Be familiar with common laboratory tests and what their results may indicate.

TOP: Laboratory testing

25. Which one of the following statements is incorrect about blood urea nitrogen (BUN)?
- a. BUN is a concentration of urea nitrogen in the blood.
 - b. Urea is formed in the liver and carried to the kidneys through the blood.
 - c. BUN is more sensitive than serum creatinine in determining renal impairment.
 - d. BUN is the end-product of cellular metabolism.

ANS: C

Serum creatinine is more sensitive than BUN in determining renal impairment.

PTS: 1

REF: p. 34

OBJ: Be familiar with common laboratory tests and what their results may indicate.

TOP: Laboratory testing