

# **Test Bank for Examination Review for Ultrasound 2nd Penny**

## Chapter 1: Abdominal Sonography Overview

### Multiple Choice

1. Which of the following correctly orders the normal organs from least echogenic to most echogenic?
  - A. Renal sinus, spleen, gallbladder
  - B. Pancreas, liver, gallbladder
  - C. Gallbladder, renal cortex, pancreas
  - D. Renal pyramids, pancreas, liver

Answer: C

2. What term describes a lesion with cystic and solid components?
  - A. Complex
  - B. Heterogeneous
  - C. Hypoechoic
  - D. Hyperechoic

Answer: A

3. What are the criteria of a simple cyst?
  - A. Smooth borders, through transmission, and hypoechoic
  - B. Anechoic, smooth walls, and round shape
  - C. Smooth borders, anechoic, through transmission, and round shape
  - D. Hyperechoic walls, anechoic, and through transmission

Answer: C

4. What is the purpose of having a patient fast for 8 hours prior to an abdominal ultrasound?
  - A. Provides a clearer examination by minimizing gas in the small intestine

- B. Allows for maximal distension of the gallbladder
- C. Allows for maximal distension of the urinary bladder
- D. Provides a full stomach to help delineate the pancreatic tail

Answer: B

5. A decreased hematocrit indicates which of the following?
- A. Active infection
  - B. Renal insufficiency
  - C. Biliary obstruction
  - D. Internal bleeding

Answer: D

6. If a patient's lab results indicate increased amylase, increased lipase, and increased bilirubin, which of the following organs is likely diseased?
- A. Liver
  - B. Gallbladder
  - C. Kidney
  - D. Thyroid gland

Answer: B

7. What is the purpose of standard precautions?
- A. To decrease the spread of infection
  - B. To ensure good ergonomics are employed in all ultrasound settings
  - C. To ensure patient records are appropriately protected
  - D. To ensure all ultrasound personnel practice good hygiene

Answer: A

8. Which of the following exams would require the sonographer to practice surgical asepsis?
- A. Renal scan
  - B. Breast scan
  - C. Transvaginal scan
  - D. Fine needle aspiration of liver nodule

Answer: D

9. Why is a 2- to 5-MHz transducer generally utilized for imaging the liver?
- A. The lower frequencies allow for better penetration because the liver is a large organ.
  - B. The lower frequencies allow for better resolution so fine detail can be observed.
  - C. The lower frequencies allow for better contrast resolution of the fine texture of the liver.
  - D. The lower frequencies allow for creation of the tissue texture characteristic of the liver tissue.

Answer: A

10. Which solid pediatric malignancy occurs in the kidney?
- A. Neuroblastoma
  - B. Hepatoblastoma
  - C. Wilms tumor
  - D. Transitional cell carcinoma

Answer: C

11. Why is it important for the sonographer to be able to identify imaging artifacts?
- A. They can aid in the identification of tissue location.
  - B. Tissue composition is often confirmed by the presence of an artifact.
  - C. They can make biopsy easier by portraying a lesion closer to the surface.
  - D. They hinder the sonographer's ability to perform quality ultrasound exams.

Answer: B

12. Which of the following artifacts causes a laterally displaced duplication of the real structure?
- A. Refraction
  - B. Reverberation
  - C. Mirror image
  - D. Edge shadowing

Answer: A

13. What sonographic feature is consistent with a benign mass?
- A. Smooth borders
  - B. Stellate projections
  - C. Internal echoes with septations
  - D. Thick irregular wall

Answer: A

14. Which of the following artifacts can be helpful in identifying air in the biliary tree?
- A. Refraction
  - B. Reverberation
  - C. Comet tail
  - D. Ring down

Answer: D

15. Which organs should be interrogated if the patient is diagnosed with Budd–Chiari syndrome?
- A. Liver and IVC
  - B. Cerebellum and cisterna magna
  - C. Kidneys and liver
  - D. Aorta and IVC

Answer: A

16. What finding can right-sided enlargement of the heart cause on an abdominal sonogram?
- A. Abdominal aortic aneurysm
  - B. Enlargement of the portal vein
  - C. Enlargement of the IVC
  - D. Hepatofugal flow in the portal vein

Answer: C

17. Which of the following is an example of an endocrine organ?
- A. Spleen
  - B. Adrenal gland
  - C. Salivary glands
  - D. Breast

Answer: B

18. What is exudate ascites in the subhepatic space?
- A. Malignant form of ascites found between the liver and the kidney
  - B. Serous fluid collection in the peritoneum just inferior to the diaphragm
  - C. Collection of urine in the peritoneum between the urinary bladder and the uterus
  - D. Retroperitoneal fluid collection between the urinary bladder and the pubic symphysis

Answer: A

19. Which of the following is most likely a malignant tumor?
- A. Hamartoma
  - B. Pheochromocytoma

- C. Adenomyomatosis
- D. Choriocarcinoma

Answer: D

20. What is a tumor marker?

- A. Substances produced by cancer cells or organs when cancer is present
- B. A group of sonographic findings that are all consistent with cancer
- C. A group of symptoms used to stage a cancer
- D. A blood test used to determine a patient's genetic predisposition to cancer

Answer: A