CONTINUING EDUCATION TEST: SNM Practice Guideline for Hepatobiliary Scintigraphy 4.0 (Article Can Be Found on Page XX)

1. To permit timely gallbladder visualization, the adult patient must fast for a minimum of ____ and preferably ____ hours before the administration of the radiotracer injection.
   A. 1; 5.
   B. 2; 6.
   C. 3; 7.
   D. 4; 8.

2. Fasting for longer than 24 h can cause all of the following except...
   A. Nonfilling of the gallbladder.
   B. A false-positive study.
   C. Premature filling of the gallbladder beyond the normal range.
   D. Delayed filling of the gallbladder beyond the normal range.

3. $^{99m}$Tc-mebrofenin is preferred in some cases to $^{99m}$Tc-disofenin because it...
   A. Has a higher hepatic uptake.
   B. Has a higher gallbladder uptake.
   C. Is easier to inject.
   D. Is cheaper.

4. Morphine sulfate may be injected when acute cholecystitis is suspected and the gallbladder is not seen by...
   A. 10–40 min.
   B. 20–50 min.
   C. 30–60 min.
   D. 40–70 min.

5. Which of the following is not true about morphine sulfate and hepatobiliary imaging?
   A. It can cause temporary spasm of the sphincter of Oddi.
B. It may be necessary to give a second injection of the radiotracer.
C. The dose of morphine sulfate is 0.04 mg/kg or a standard dose of 2 mg.
D. Imaging should continue for another 15 min after the morphine injection.

6. A *pericholecystic hepatic band of increased activity known as the rim sign is an indication of...*
   A. Duodenogastric bile reflux.
   B. Severe late-stage acute cholecystitis.
   C. Common bile duct obstruction.
   D. Reduced gallbladder ejection fraction.

7. *Prompt liver uptake but no secretion of radiotracer into biliary ducts is an indication of...*
   A. Common bile duct obstruction.
   B. Duodenogastric bile reflux.
   C. Severe late-stage acute cholecystitis.
   D. Reduced gallbladder ejection fraction.

8. *Which of the following will not cause a false-positive study (gallbladder nonvisualization in the absence of acute cholecystitis)?*
   A. Severe hepatocellular disease.
   B. Acute cholecystitis.
   C. Pancreatitis.
   D. Previous cholecystectomy.

9. *Which of the following will not cause a false-negative study (gallbladder visualization in the presence of acute cholecystitis)?*
   A. Congenital anomalies simulating the gallbladder.
   B. A bowel loop simulating the gallbladder.
   C. Acute acalculous cholecystitis.
   D. Gallbladder visualization in less than 60 min.
10. *The organ receiving the largest radiation dose from $^{99m}$Tc-disofenin or -mebrofenin is the...*

A. Stomach.
B. Gallbladder.
C. Liver.
D. Colon.