

Practice Exam Questions



AMERICAN BOARD OF CERTIFICATION
FOR GASTROENTEROLOGY NURSES

CGRN

Certified Gastroenterology Registered Nurse



EXAMAIDES

PASS YOUR EXAM AT FIRST TRY

1. Which of the following dairy products is MOST LIKELY to contain the least lactose for those who are lactose intolerant?

1. Whole milk
2. Cheese
3. Regular whole-fat yogurt
4. Greek-style whole-fat yogurt

2. Unless otherwise specified by manufacturer, multi-use vials that have been accessed and used should be discarded within which of the following time periods?

1. One week
2. 14 days
3. 28 days
4. 60 days

3. Which of the following is a reversal agent for excessive sedation of a patient who has received a benzodiazepine?

1. Atropine
2. Romazicon (Flumazenil®)
3. Naloxone (Narcan®)
4. N-acetylcysteine

4. Following an esophagoscopy to obtain a biopsy of the thoracic esophagus, which of the following symptoms MOST indicates the need for emergent care for perforation?

1. Chest pain, dysphagia, and tachycardia
2. Mild cough and sore throat
3. Nausea and vomiting
4. Local discomfort but no systemic response

5. A 76-year-old female ate *E. coli* (O157:H7) contaminated vegetables and developed abdominal cramps and non-bloody diarrhea for 48 hours after which the diarrhea became bloody for 4 days. The patient is MOST at risk for developing which of the following?

1. Intestinal necrosis
2. Small bowel obstruction
3. Intestinal perforation
4. Hemolytic uremic syndrome

6. A patient taking metoclopramide has been prescribed haloperidol. For which of the following does this drug combination put the patient at increased risk?

1. Tachycardia
2. Tardive dyskinesia
3. Excessive sedation
4. GI bleeding

7. If a patient scheduled for a colonoscopy has a nose stud and enclosed lip ring, which of the following actions is appropriate?

1. Remove the lip ring and tape the nose stud securely
2. Leave both in place
3. Remove both prior to the procedure
4. Remove the nose stud but leave the lip ring in place

8. Cancer of the colon and rectum is primarily which of the following types of cancer?

1. Adenocarcinoma
2. Sarcoma
3. Lymphoma
4. Melanoma

9. According to the WHO three-step ladder approach to pain management, if a patient's abdominal pain associated with colon cancer varies from 4 to 8 on the pain scale, at which of the following steps should pain control be initiated?

1. Step 1
2. Step 2
3. Step 3
4. Whichever step is appropriate at the time of initiation

10. How soon after collection should duodenal aspirate be transported to the laboratory?

1. Immediately
2. Within 2 hours
3. Within 4 hours
4. Within 24 hours

11. The gastroenterology unit has experienced an outbreak of *Clostridium difficile* infections involving 10 patients over a 2-week period. In order to reduce further transmission of the infection, on which of the following should the staff should concentrate efforts?

1. Antibiotic stewardship
2. Contact precautions/hand hygiene
3. Testing patient stool specimens
4. Limiting patient contacts

12. A patient with Crohn's disease is to begin treatment with infliximab, a biologic response modifier. For which of the following should the patient be tested prior to beginning treatment?

1. Anemia
2. Diabetes and hepatitis C
3. TB and hepatitis B
4. Hepatitis A and B

13. A Navajo patient tells the nurse that he has "ghost sickness." Which of the following is the MOST appropriate response?

1. "There is no such disease."
2. "What do you mean?"
3. "Is that a common name for a real illness?"
4. "How does ghost sickness make you feel?"

14. Doppler ultrasound is used primarily to assess which of the following?

1. Size and shape
2. Blood flow
3. Function
4. Consistency (air-filled, fluid-filled)

15. The nurse is using the BVMGR (beliefs, values, meanings, goals, and relationships) rubric for implementing spiritual care. To which of the following do these aspects apply?

1. The nurse
2. The culture
3. The patient
4. The organization

16. Capsule endoscopy is used primarily to examine which part of the gastrointestinal tract?

1. Small intestine
2. Large intestine
3. Stomach
4. Esophagus

17. Which of the following increases the risk of aspiration for a patient receiving NG feedings?

1. Head elevated at 45 degree
2. Continuous feeding
3. Young age
4. History of diabetes mellitus

18. A patient complains of increasing abdominal pain and has been passing 3 to 4 sticky, black foul-smelling stools for 4 days and exhibits postural hypotension, hemoglobin of 9.2 mg/dL, and hematocrit of 28%. Which of the following should the nurse suspect?

1. Iron deficiency anemia and intestinal perforation
2. Hemolytic anemia and gastritis
3. Iron deficiency anemia and upper GI bleeding
4. Iron deficiency anemia and lower GI bleeding

19. A patient has been prescribed antibiotic therapy and probiotics to help to maintain intestinal flora. Which of the following statements BEST describes the appropriate administration?

1. The antibiotic and the probiotics should be taken simultaneously
2. The antibiotic and the probiotics should be taken at least 2 hours apart
3. The probiotics should be started only after completing the antibiotic
4. The probiotics should be taken for 2 days before beginning the antibiotic

20. The nurse hears a patient's physician complaining that a patient is "difficult and impatient," and the nurse tells the physician that the patient is very frightened and acting defensively. Which of the followings aspects of care is the nurse exhibiting?

1. Advocacy
2. Patient equality
3. Human dignity preservation
4. Caring practice

21. Imaging shows that a patient has an intestinal obstruction from a cancerous lesion at the duodenum. The patient is MOST likely to exhibit which of the following signs and symptoms?

1. Copious emesis of undigested food, succession splashing bowel sounds, but absence of abdominal pain or distention
2. Moderate emesis, hyperactive bowel sounds, and upper abdominal pain
3. Moderate abdominal distention, colicky cramping, and hyperactive bowel sounds
4. Marked abdominal distention, some emesis (late), borborygmi, and colicky pain in central and lower abdomen

22. Which of the following herbal preparations should the nurse advise a patient to avoid when taking immunosuppressant drugs?

1. Melatonin
2. St. John's wort
3. Chamomile
4. Curcumin

23. If two grounding pads (AKA return electrodes) are utilized during a procedure involving electrical cautery, which of the following is a correct placement?

1. Upper thigh and lower thigh
2. Left thigh and right calf
3. Right upper thigh and left upper thigh
4. Anterior thigh and posterior thigh

24. When reviewing medications for a patient with cirrhosis, the nurse must consider that the liver disease may MOST affect which of the following?

1. Absorption
2. Metabolism
3. Distribution
4. Excretion

25. Ensuring that a patient has given informed consent and understands his or her rights and all of the risks and benefits of a procedure or treatment supports which of the following ethical principles?

1. Beneficence
2. Nonmaleficence
3. Justice
4. Autonomy

26. A patient with inflammatory bowel disease has periodic bouts of severe diarrhea but is unsure of the cause. Which of the following should the nurse advise the patient to do to try to resolve the problem?

1. Maintain a food diary
2. Avoid all milk products
3. Increase fat in diet
4. Increase fiber in diet

27. Absorption of nutrients from the small bowel is often impaired in older adults because of which of the following?

1. Age-related cellular mutations
2. Decreased muscular contractility
3. Narrowing and lengthening of villi
4. Broadening and shortening of villi

28. A 72-year-old patient has 3 polyps removed during a routine colonoscopy. Which of the following types of polyps are precancerous?

1. Epithelial hyperplastic
2. Adenomatous
3. Inflammatory
4. Submucosal (fibroma)

29. The nurse is educating a patient who is to be discharged after surgery to remove a cancerous lesion of the colon and create a colostomy. Which of the following foods may cause a noticeable odor?

1. Green beans, raw fruits, spicy foods, and spinach
2. Popcorn, seeds, raw vegetables, and corn
3. Fish, eggs, onions, broccoli, and cabbage
4. Beans, carbonated beverages, strong cheeses, and sprouts

30. Following a colonoscopy with removal of polyps, a patient developed abdominal pain with elevated temperature, WBC count and C-reactive protein. Which of the following interventions does the nurse anticipate initially?

1. Abdominal CT
2. Repeat colonoscopy
3. Antibiotic therapy
4. Exploratory laparotomy

31. If a patient develops an infection with a multi-drug resistant organism (MDRO), the nurse anticipates that the patient's history will show which of the following?

1. Auto-immune disorder
2. Pneumonia
3. Diabetes mellitus
4. Prior antibiotic use

32. The standard triple therapy for *H. pylori*-associated peptic ulcer disease includes a proton pump inhibitor BID, clarithromycin 500 mg BID, and which of the following?

1. Bismuth subcitrate potassium 140 mg qd
2. H-2 receptor antagonist
3. Amoxicillin 1 g BID
4. Misoprostol 200 mcg QID

33. When lifting an item, which of the muscles should be used?

1. The muscles in the legs
2. The muscles in the arm
3. The muscles in the lower back
4. The muscles in the upper back and shoulders

Answer Key and Explanations

1. 4. Because Greek-style yogurt is thicker than regular whole-fat yogurt, more of the whey is removed, and the lactose is part of the whey, so those who are lactose intolerant are more likely to tolerate Greek yogurt than other dairy products. Those who are lactose intolerant lack the enzyme needed to digest lactose, resulting in stomach cramps, gas and distention, and diarrhea after eating or drinking dairy products. Some dairy products are now lactose-free, and Lactaid® can be taken to replace the missing enzymes.

2. 3. Unless otherwise specified by manufacturer, multi-use vials that have been accessed and used should be discarded within 28 days. Multi-use vials contain preservatives but can become contaminated with bacteria and provide no protection against viruses. Multi-use vials should be reserved for only one patient whenever possible and should be maintained in a separate space from the treatment area to prevent inadvertent contamination. A new needle and syringe should be used each time the vial is accessed.

3. 2. Romazicon (Flumazenil®) is a reversal agent for excessive sedation of a patient who has received a benzodiazepine although it does not reverse respiratory depression. Romazicon is administered IV with a beginning dose of 0.2 mg over 30 seconds with repeat doses at one-minute intervals as needed. The second dose is 0.3 mg and the third and subsequent doses are 0.5 mg. Epinephrine is used for emergent treatment of asystole, VF, and PEA; naloxone, for opioids; and N-acetylcysteine, for acetaminophen overdose.

4. 1. Following an esophagoscopy to obtain a biopsy of the thoracic esophagus, chest pain, dysphagia, and tachycardia are indications of the need for emergent care for perforation. Onset of fever is often rapid, and Hamann's sign (crunching, rasping precordial sound coinciding with the heartbeat) is positive because of leakage of air to the mediastinum. Perforation is usually confirmed radiologically although CT or endoscopy may be necessary if the perforation cannot be seen on x-ray.

5. 4: If a 76-year-old female ate *E.coli* (O157.H7) contaminated vegetables and developed abdominal cramps and non-bloody diarrhea that persisted for 48 hours after which the diarrhea became bloody for 4 days, the patient is at risk for developing hemolytic uremic syndrome (HUS), which can lead to renal failure. Children under 5 and older adults are most likely to develop HUS. HUS is characterized by microangiopathic hemolytic anemia, thrombocytopenia, and acute renal failure.

6. 2: If a patient taking haloperidol has been prescribed metoclopramide, this drug combination puts the patient at increased risk of developing tardive dyskinesia. Both drugs can cause uncontrollable movement disorders and this combination potentiates the effect and can lead to life-threatening neuroleptic malignant syndrome. The risk of developing tardive dyskinesia with metoclopramide increases with treatment extending beyond 12 weeks. Metoclopramide may also interact with numerous other drugs, including other antipsychotic drugs and phenothiazines.

7. 3: If a patient scheduled for a colonoscopy has a nose stud and enclosed lip ring, they should both be removed prior to the procedure because they pose the risk of trauma and aspiration if they should become dislodged. Nose studs are removed by applying gentle pressure and pulling straight out. Enclosed lip rings are removed by applying pressure inside of the ring to force the ends apart. Barbell-type jewelry has a bead on the end that is unscrewed in a counter-clockwise direction.

8. 1: Cancer of the colon and rectum is primarily (about 95%) adenocarcinoma, which arises in the epithelial lining of the bowel. Adenocarcinomas often develop from a precancerous polyp. Early detection through screening is essential because colorectal cancers may remain essentially asymptomatic until they are advanced and changes in bowel habits or rectal bleeding occurs. Hemorrhage may occur if the tumor invades blood vessels, and obstruction may occur as the mass enlarges.

9. 4: According to the WHO three-step ladder approach to pain management, if a patient's abdominal pain associated with the colon varies from 4 to 8 on the pain scale, pain control should be initiated at whichever step is most appropriate for the level of pain at the time and then may later be adjusted to a higher or lower step. While this is a three-step process, it is not necessary to start all pain control at step one.

10. 1: Duodenal aspirate should be immediately transported to the laboratory because it must be examined within 60 minutes of collection. The aspirate should be collected (at least 2 mL) in a sterile centrifuge tube. Duodenal aspirates may be useful in diagnosing *Giardia duodenalis* and *Strongyloides stercoralis*. Culture and sensitivity may also be done. The specimen should be maintained at room temperature.

11. 2: If the gastroenterology unit has experienced an outbreak of *Clostridium difficile* infections involving 10 patients over a two-week period, in order to reduce transmission of the infection, the nurse and staff members should concentrate efforts on the utilization of proper contact precautions and hand hygiene as the infection is easily spread through contaminated hands. The spores can remain viable on environmental surfaces for long periods of time. Housekeeping procedures should also be reviewed.

12. 3: If a patient with Crohn's disease is to begin treatment with infliximab or any other biologic response modifier, the patient should be tested for TB and hepatitis B prior to beginning treatment. Because the drugs have immunosuppressive qualities, they can result in reactivation of both diseases. Biologic response modifiers are also contraindicated for those with a history of lymphoma and may result in severe allergic responses in some patients because they are derived from proteins and not chemicals.

13. 4: If a Navajo patient tells the nurse that he has "ghost sickness," the most appropriate response is: "How does ghost sickness make you feel?" This response respects the patient's perception of the disease and helps the nurse to understand what symptoms the patient is attributing to the disorder. The Navajo believe that ghost sickness is brought about by evil spirits and believe that a tribal healer may be able to overcome the spirit. Typical symptoms include weakness, nightmares, fear, and feelings of suffocation.

14. 2: Doppler ultrasound is used primarily to assess blood flow (direction, speed). As part of an abdominal ultrasound, Doppler ultrasound may help to identify impaired circulation to the organs as well as changes in blood flow associated with tumors. Doppler imaging differentiates between antegrade (expected forward movement) and retrograde (unexpected movement) blood flow. Doppler imaging is often used to assess hepatic blood flow as different disease processes result in distinctive changes in blood flow.

15. 3: If the nurse is using the BVMGR (beliefs, values, meanings, goals, and relationships) rubric for implementing spiritual care, these aspects apply to assessment of the patient. That is, the nurse should try to understand the patient's BVMGR and should not let personal BVMGR intrude and should avoid any indication of proselytizing when the nurse's BVMGR is at odds with the patient.

While the nurse may not share the patient's belief system, the nurse should always seek to understand and to show respect for it.

16. 1: Capsule endoscopy is used primarily to examine the small intestine, which, because of its length, is otherwise difficult to assess as it cannot be reached with colonoscopy or esophagogastroduodenoscopy. The capsule, which is swallowed by the patient, contains a miniature camera and LEDs. The camera wirelessly transmits pictures to a receiver as it passes through the small intestine. The capsule is usually passed anally within 24 to 48 hours although there is a small risk of retention.

17. 4: A history of diabetes mellitus, major abdominal/thoracic trauma, and neurological disorders increases the risk of aspiration for a patient receiving tube feedings. Patients should be positioned with the head elevated to 45 degrees if possible and supine position avoided. Continuous feedings pose less risk than intermittent or bolus feedings, and the older patient is at greater risk than the younger. Metoclopramide may be given to increase the rate of gastric emptying. The tube should be checked for correct position at every feeding or every 4 to 6 hours if feedings are continuous.

18. 3: If a patient complains of increasing abdominal pain and has been passing 3 to 4 sticky foul-smelling stools for 4 days, exhibits postural hypotension, and has a hemoglobin of 9.2 mg/dL (92 mmol/L) and hematocrit 28%, the nurse should suspect iron deficiency anemia with upper GI bleeding. The anemia occurs from blood loss (low hemoglobin and hematocrit with normal MCV) and the melena is from blood in the upper GI tract that is exposed to digestive enzymes. The BUN is often elevated because of increased absorption of blood.

19. 2: If a patient has been prescribed antibiotic therapy and probiotics to help to maintain intestinal flora, the antibiotic and the probiotics at least 2 hours apart because the antibiotic can kill not only the bacteria already present in the intestines but also the bacteria in the probiotics. Probiotics that contain *Saccharomyces boulardii* also may help to reduce toxins produced by *Clostridium difficile*. Patients who are severely immunocompromised and taking long-term broad-spectrum antibiotics have developed sepsis from probiotics, so probiotics should be used with care in these patients.

20. 1: If the nurse hears a patient's physician complaining that a patient is "difficult and impatient," and the nurse tells the physician that the patient is very frightened and acting defensively, the aspect of care that the nurse is exhibiting is advocacy. The nurse is speaking up in defense of the patient and acting for the patient's benefit in trying to help the physician have a more balanced view of the patient's behavior.

21. 1: If imaging shows that a patient has an intestinal obstruction from a cancerous lesion at the duodenum, the signs and symptoms likely include copious emesis of undigested food (with no evidence of bile) after eating, succession splashing bowel sounds in the left upper quadrant but generally absence of abdominal pain or distention. If the condition persists untreated, the patient may show signs of dehydration and muscle wasting. The stomach may begin to dilate and excessive peristaltic action may be evident.

22. 2: The nurse should advise a patient to avoid taking St. John's wort when taking immunosuppressant drugs. St. John's wort is commonly used to treat depression and anxiety; however, it may interact with many different drugs, so if patients indicate an interest in taking the herbal preparation, the nurse should carefully review the patient's list of drugs. St. John's wort should also not be taken with antibiotics, birth control pills, antidepressants, warfarin, or anticonvulsants.

23. 3: If two grounding pads (AKA return electrodes) are utilized during a procedure involving electrical cautery, a correct placement is the right upper thigh and the left upper thigh. Grounding pads should be placed at a distance from the surgical site and, if two are utilized, they should be placed equidistantly and symmetrically and never on just one limb as this increases the risk of burns. Using two pads divides the current and reduces risk of burns. The pads must be fully in contact with the skin and placed according to manufacturer's directions.

24. 2: When reviewing medications for a patient with cirrhosis, the nurse must consider that the liver disease may affect drug metabolism, which is the process of biotransformation. While some metabolism occurs in the skeletal muscles, lungs, kidneys, plasma, and intestines, most metabolism occurs in the liver through the action of microsomal enzymes (AKA cytochrome P-450 enzymes). These enzymes target primarily lipophilic drugs, which comprise the majority of drugs in common use.

25. 4: Autonomy is the ethical principle that the individual has the right to make decisions about his/her own care, based on informed consent and understanding of risks and benefits. Beneficence is an ethical principle that involves performing actions that are for the purpose of benefitting another person. Nonmaleficence is an ethical principle that means healthcare workers should provide care in a manner that does not cause direct intentional harm to the patient. Justice is the ethical principle that relates to the distribution of the limited resources of healthcare benefits to the members of society.

26. 1: If a patient with inflammatory bowel disease (IBD) has bouts of severe diarrhea but is unsure of the cause, the nurse should advise the patient to maintain a food diary, writing down all food and fluid intake to see if a pattern emerges. While many patients with IBD are lactose intolerant, testing can show if this is the problem. Increasing fat or fiber in the diet may aggravate the diarrhea.

27. 4: Absorption of nutrients from the small bowel is often impaired in older adults because of broadening and shortening of villi, which decreases the surface area available. Additionally, levels of some enzymes decrease. For example, lactase levels may fall, and this can cause increased lactose intolerance. When fecal material moves slowly through the bowels, bacterial overgrowth may occur, and this can affect absorption of nutrients because the bacteria require nutrients and can also cause diarrhea, which interferes with absorption.

28. 2: If a 72-year-old patient has polyps removed, the type of polyp that is precancerous is the adenomatous polyp, which can include tubular adenomas, tubular villous adenoma, and villous adenoma. Polyps associated with hereditary polyposis syndromes (familial adenomatous polyposis) are also precancerous. Patients with precancerous polyps are generally advised to have routine follow-up colonoscopies every 3 years because of increased risk of colon cancer.

29. 3: The nurse is educating a patient who is to be discharged after surgery to remove a cancerous lesion of the colon and create a colostomy. The nurse advises the patient that some foods may cause:

- Odor: fish, eggs, onions, broccoli, asparagus, and cabbage.
- Gas: beans, carbonated beverages, strong cheeses, beer, and sprouts.
- Diarrhea: beer, green beans, coffee, raw fruits, spicy foods, and spinach.
- Obstruction: popcorn, seeds, raw vegetables, nuts, and corn.

30. 1: If, following a colonoscopy with removal of polyps, a patient developed abdominal pain with elevated temperature, WBC count, and C-reactive protein, the patient should have an abdominal CT

to differentiate between thermal injury causing perforation and one causing post-polypectomy electrocoagulation syndrome (transmural burn without perforation). Symptoms for both are similar initially, but post-polypectomy electrocoagulation syndrome heals with conservative treatment while perforation requires surgical repair.

31. 4: If a patient develops an infection with a multi-drug resistant organism (MDRO), the nurse anticipates that the patient's history will show previous antibiotic use as this is a factor in almost all cases. Other risk factors include prolonged hospitalization and intraabdominal surgery. MDRO infections are increasingly resistant to 2 or more antibiotics, including vancomycin. Restriction of vancomycin use alone has not proven successful in controlling development of MDRO because multiple other antibiotics are implicated.

32. 3: The standard triple therapy for *H. pylori*-associated peptic ulcer disease include a proton pump inhibitor BID, clarithromycin 500 mg BID, and amoxicillin 1 g BID. Metronidazole 500 mg BID may be substituted for amoxicillin for those with penicillin allergy. Treatment is usually continued for 10 to 14 days. Using two antibiotics is especially important because of increasing resistant strains. The standard triple therapy is most commonly utilized, but a standard quadruple therapy and sequential quadruple therapy may also be considered.

33. 1: When lifting an item, the muscles in the legs should be used. The nurse should stand close to the item or person being lifted and use the leg muscles to support weight rather than the arms or back and should stoop down rather than bending over. If items or people are heavy, then lift devices should be used rather than lifting manually. If items are up high, the nurse should avoid stretching but should use a step stool or gripping device to reach the item.

34. 2: When palpating a patient's abdomen, a positive Murphy's sign (sudden holding of breath with RUQ palpation) indicates cholecystitis. Murphy's sign is usually negative with choledocholithiasis although cholecystitis is most often caused by gallstones that obstruct the flow of bile, causing the gallbladder to swell and become inflamed. However, cholecystitis may also result from tumors or impaired circulation (common with diabetics). Typical symptoms include nausea and vomiting and severe middle or RUQ abdominal pain.

35. 3: If a patient is receiving methotrexate for maintenance treatment of Crohn's disease, laboratory tests that should be routinely monitored include the CBC and renal (creatinine and BUN) and liver function tests. FDA guidelines advise testing at least every 1 to 2 months during therapy, but some authorities recommend testing every 2 to 4 weeks during the first few months of treatment. Adverse effects of methotrexate include renal failure, portal fibrosis, myelosuppression, headache, and rash.

36. 2: If a patient presents with symptoms consistent with diverticulosis, the imaging technique that will likely be used to confirm the diagnosis is colonoscopy, which allows biopsy to rule out other disorders and allows visualization of involvement. Ultrasound shows non-specific abnormalities and cannot conclusively diagnose diverticulitis, colonic contrast studies, such as barium enema, have limited value because most diverticula are extraluminal, and it increases the risk of perforation if peritoneal irritation is present.

37. 1: The primary tests that screen for hepatitis include alanine transaminase (ALT) (normal 5-35 units) and aspartate transaminase (AST) (normal 10-40 units). These are liver enzymes that increase with inflammation and damage to hepatic cells. ALT is more specific than AST and usually shows a higher increase. ALT may increase to 10 times normal with acute infection and 2 to 3 times