

Answers

CHAPTER 33 NURSING CARE OF PATIENTS WITH UPPER GASTROINTESTINAL DISORDERS

AUDIO CASE STUDY

Darnell and Peptic Ulcer Disease

1. The bacteria called *Helicobacter pylori*, commonly referred to as *H. pylori*.
2. Burning, gnawing pain in the upper epigastric region. Pain when food is eaten or 1 to 2 hours after eating. Anorexia, nausea, and vomiting also may occur.
3. The most effective treatment for *H. pylori* is triple therapy: two antibiotics to decrease bacterial resistance and a proton pump inhibitor (PPI) or H2-receptor antagonist.

VOCABULARY

Sample sentences will vary for the Vocabulary problems.

1. *Helicobacter pylori*
2. anorexia
3. gastritis
4. aphthous stomatitis
5. bariatric

6. steatorrhea
7. gastrectomy
8. obesity
9. hiatal hernia
10. gastrojejunostomy

GASTRITIS

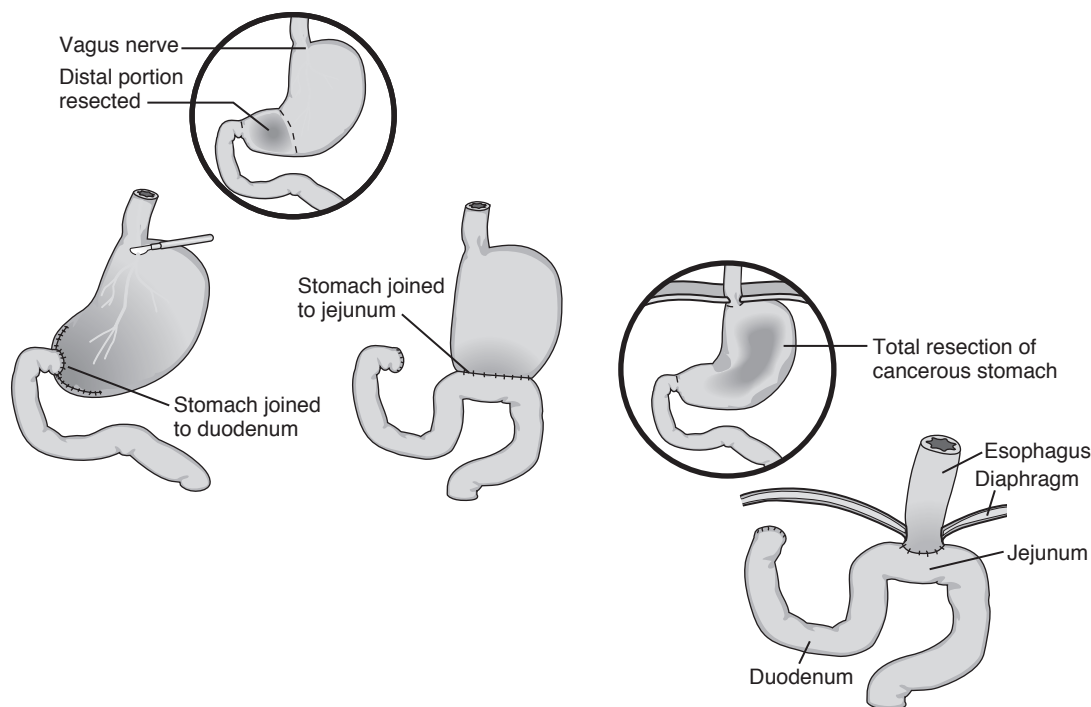
1. (1)
2. (2)
3. (1)
4. (3)
5. (2)
6. (1)
7. (3)
8. (1)

PEPTIC ULCER DISEASE

Corrections are in boldface.

Most peptic ulcers are caused by *Helicobacter pylori*. Peptic ulcers are commonly found in the **duodenum**. Symptoms of peptic ulcers include burning and a gnawing pain in the **epigastric region**. With a duodenal ulcer, there is pain and discomfort **on an empty** stomach, which may be relieved by **ingesting** food. Peptic ulcers **can** be cured. Medication treatment for peptic ulcers caused by *H. pylori* should include **antibiotics** as indicated.

GASTRECTOMY



PRIORITIZATION

(2, 1, 3, 4) is correct. (2) See Mr. Wu first and empty the suction drain to ensure that his airway is not compromised. (1) Collect data and if safe, medicate Mrs. Warden for postoperative pain. (3) See Mr. Swanson and ensure that he is stable. (4) See Ms. Kling and spend time with her as needed to provide support due to her new diagnosis of metastatic cancer.

CLINICAL JUDGMENT

1. Your first action is to prevent Mrs. Sheffield from aspirating. Maintain Mrs. Sheffield in a side-lying position, remind her to remain in this position, and prop her up with pillows so she does not aspirate. Verify that the nasogastric (NG) tube is patent and suction is working.
2. Next take her vital signs.
3. You believe that Mrs. Sheffield is in the early stages of hypovolemic shock (increased pulse and respirations, decreased temperature and blood pressure, and diaphoresis) and that her gastric bleeding needs to be stopped immediately. Maintain the intermittent low-wall suction to remove the gastric output and thus prevent further gastric distention and vomiting. Maintain the intravenous (IV) fluids to compensate for the fluid loss. Immediately notify the health-care provider of Mrs. Sheffield's condition.
4. C: I am concerned about Mrs. Sheffield's postoperative condition. She has returned from surgery and vomited bright red emesis; vital signs are blood pressure 86/60 mm Hg, pulse 96 beats per minute, respirations 24 per minute, and temperature 97.6°F (36.4°C);

250 mL of bright red drainage from NG tube; IV infusing of lactated Ringer solution at 100 mL/hr; and she is diaphoretic.

U: I am uncomfortable with her current status.

S: I believe she is not safe and could possibly be bleeding from the surgery. She is presenting signs of hypovolemic shock.

5. Apply oxygen at 2 L/min via nasal cannula and reassure the patient that her condition is being closely monitored and that her HCP is taking her back to surgery to repair her abdomen. Ensure the laboratory work is done and review the results. Gather the equipment necessary to transport Mrs. Sheffield to surgery with oxygen, an emesis basin, and some extra blankets.

REVIEW QUESTIONS

The correct answers are in **boldface**.

1. (2) is correct. Concentrated simple sugars as in the doughnut should be avoided to prevent dumping syndrome. (1, 3, 4) These foods do not contain simple sugars and are less likely to cause dumping syndrome.
2. (1) is correct. Peptic ulcer disease is primarily caused by *H. pylori*. (2, 3, 4) were thought to cause peptic ulcer disease; however, since 1982 it was determined that *H. pylori* causes most peptic ulcers.
3. (1, 3, 5, 6) are correct. Body weight over 20%—that is, BMI greater than 30, women with a waist circumference greater than 35 inches and men with a waist circumference greater than 40 are considered obese. (2) Ideal body weight <10% is normal. (4) A BMI of 24 is normal.

4. (2) is correct. H₂-receptor antagonists inhibit the secretion of gastric acid. (1) Antacids neutralize gastric acid. (3) Proton pump inhibitors bind to an enzyme in the presence of acidic gastric pH, preventing final transport of hydrogen ions into the gastric lumen. (4) Mucosal barrier fortifiers form a protective paste.
5. (1) is correct. Anorexia is a symptom of chronic environmental gastritis. (2) Dysphagia is seen in esophageal cancer. (3) Diarrhea is not a sign of chronic environmental gastritis but can be seen with other GI disorders such as dumping syndrome. (4) A feeling of fullness can occur in patients with gastric cancer.
6. (2, 3, 4, 5) are correct. Diaphoresis and hypotension are common signs of hypovolemic shock. Restlessness and confusion are an indication of altered oxygenation, which accompanies shock. (1) The pulse would be weak and thready, not bounding.
7. (3) is correct. A low-fat diet is advised to decrease the fat content in the stool. (1) A soft diet does not address the patient's problem of inadequate mixing of food with pancreatic and biliary secretions to digest fats; a low-fat diet would be more helpful for this. (2) A high-carbohydrate diet does not prevent fat from being introduced in the diet. (4) A pureed diet would not be helpful because it could contain fat.
8. (2) is correct. Sucralfate should be taken on an empty stomach so it can form a viscid and sticky gel to adhere to the ulcer surface. This provides a protective barrier over the ulcer before eating. (1) Sucralfate should not be taken with an antacid. (3) Sucralfate can commonly cause constipation, not diarrhea. (4) The patient should take the medication until the ulcer is healed and directed to stop taking the medication from the HCP.
9. (4) is correct. Eating small, frequent meals that can pass easily through the esophagus prevents the rapid filling of the stomach and thus heartburn and regurgitation. (1) Eating 3 hours or less before bedtime should be avoided so the stomach is empty to prevent reflux. (2) The patient should avoid reclining for 1 hour after eating because reclining would promote reflux, not prevent it. (3) The patient should sleep in an elevated position to prevent reflux by raising the head of the bed on 6-inch blocks and using pillows.
10. (3) is correct. Start the oxygen first. Use the Maslow hierarchy of human needs to help prioritize interventions. Oxygen administration will increase the amount of oxygen in the vascular system, thus increasing the oxygen to the tissues. (1) The intravenous bag should be hung next to help restore and maintain volume. (2) The laboratory can be called to draw blood for a complete blood count while other interventions are occurring. The complete blood count will give a hemoglobin level that will indicate oxygen-carrying capacity. (4) Insert the urinary catheter to monitor urinary output after oxygen is on and the IV is infusing.
11. (4) is correct. Foods that cause discomfort need to be identified so they can be avoided. (1) Large meals promote reflux, so small meals should be eaten. (2) Sleeping flat without pillows promotes reflux, so the patient should be elevated. (3) Lying down after each meal would promote reflux, so the patient should sit up for 2 hours after a meal.
12. (1) is correct. With fundoplication, the stomach fundus is wrapped around the lower part of the esophagus. If dysphagia occurs, the HCP should be notified right away because the repair may be too tight, causing obstruction of the passage of food. The head of bed should be elevated. (2, 3, 4) The patient can be medicated for pain and nausea after the HCP is notified. Food should be held until after the HCP is notified. Slow, deep breathing can help relieve pain and nausea and is encouraged postoperatively.
13. (1, 2, 5) are correct. Acute gastritis can cause bleeding, and the nurse should monitor for bloody stools. Aspirin and NSAIDs frequently cause gastritis. Antacids and H₂-receptor antagonists can be given to help control pain. (3) Sucralfate is used to treat peptic ulcers, not gastritis. (4) The patient should eat small, frequent meals and avoid alcohol and irritating foods such as acidic, greasy, or spicy items.
14. $200 \text{ mL}/60 \text{ minutes} \times 10 \text{ gtt/mL} = 33.3 \text{ gtt per minute}$, rounds to 33 gtt per minute
15. The area that is producing the coffee-grounds appearance of the patient's vomit.

