

GASTROINTESTINAL QUIZ

1. C. Relief of nausea and vomiting

Metoclopramide is classified as a prokinetic and antiemetic medication. If it is effective, the patient's nausea and vomiting should resolve. Metoclopramide does not affect blood pressure, muscle tremors, or diarrhea.

Ondansetron is a 5-HT₃ receptor antagonist antiemetic that is especially effective in reducing cancer chemotherapy-induced nausea and vomiting. Morphine sulfate may cause nausea and vomiting. Zolpidem does not relieve nausea and vomiting. Dexamethasone is usually used in combination with ondansetron for acute and chemotherapy-induced emesis.

2. B. Heartburn

Mylanta is an antacid that contains both aluminum and magnesium. It is indicated for the relief of GI discomfort, such as heartburn associated with GERD. Mylanta can cause both diarrhea and constipation as a side effect. Mylanta does not affect lower abdominal pain.

3. A. Tremors

Extrapyramidal side effects, including tremors and tardive dyskinesias, may occur as a result of metoclopramide (Reglan) administration. Constipation, double vision, and numbness in fingers and toes are not adverse effects of metoclopramide.

4. B. Drowsiness

Although being given to this patient as an antiemetic, promethazine also has sedative and amnesic properties. For this reason, the patient is likely to experience drowsiness as an adverse effect of the medication. Tinnitus, reduced hearing, and loss of balance are not side effects of promethazine.

5. C. Epigastric pain

Famotidine is an H₂-receptor antagonist that inhibits parietal cell output of HCl acid and minimizes damage to gastric mucosa related to hyperacidity, thus relieving epigastric pain. Famotidine is not indicated for nausea, belching, and dysphagia.

6. **D.** Promethazine (Phenergan)

A common adverse effect of promethazine, an antihistamine/antiemetic agent, is dry mouth; another is blurred vision. Common side effects of digoxin are yellow halos and bradycardia. Common side effects of cefotetan are nausea, vomiting, stomach pain, and diarrhea. Common side effects of famotidine are headache, abdominal pain, constipation, or diarrhea.

7. **A.** Providing IV fluids and inserting a nasogastric (NG) tube

A perforated peptic ulcer requires IV replacement of fluid losses and continued gastric aspiration by NG tube. Nothing is given by mouth, and gastric pH testing is not a priority. Calcium gluconate is not a medication directly relevant to the patient's suspected diagnosis, and parenteral nutrition is not a priority in the short term.

8. **C.** Have the patient eat 4 to 6 smaller meals each day.

Eating smaller meals during the day will decrease the gastric pressure and the symptoms of hiatal hernia. Keeping the patient NPO or in a Trendelenberg position are not safe or realistic for a long period of time for any patient. Varying antacids will only be done with the care provider's prescription, so this is not a nursing intervention.

9. **D.** Rigid abdomen and vomiting following indigestion

A rigid abdomen with vomiting in a patient who has a gastric ulcer indicates a perforation of the ulcer, especially if the manifestations of perforation appear suddenly. Midepigastric pain is relieved by eating, drinking water, or antacids with duodenal ulcers, not gastric ulcers. Back pain 3-4 hours after a meal is more likely to occur with a duodenal ulcer. Burning epigastric pain 1-2 hours after a meal is an expected manifestation of a gastric ulcer related to increased gastric secretions and does not cause an urgent change in the nursing plan of care.

10. **C.** Antibiotic(s), proton pump inhibitor, and bismuth

To eradicate *H. pylori*, a combination of antibiotics, a proton pump inhibitor, and

possibly bismuth (for quadruple therapy) will be used. Corticosteroids, aspirin, and NSAIDs are drugs that can cause gastritis and do not affect *H. pylori*.

11. **B.** No bowel movement for 3 days

MOM is an osmotic laxative that produces a soft, semisolid stool usually within 15 minutes to 3 hours. This medication would benefit the patient who has not had a bowel movement for 3 days. MOM would not be given for abdominal pain and bloating, decreased appetite, or signs of hypomagnesemia.

12. **D.** Increases peristalsis by stimulating nerves in the colon wall

Bisacodyl is a stimulant laxative that aids in producing a bowel movement by irritating the colon wall and stimulating enteric nerves. It is available in oral and suppository forms. Fiber and bulk forming drugs increase bulk in the stool; water and stool softeners soften feces, and saline and osmotic solutions cause fluid retention in the intestinal tract.

13. **D.** Take each dose with a full glass of water or other liquid.

Docusate lowers the surface tension of stool, permitting water and fats to penetrate and soften the stool for easier passage. The patient should take the dose with a full glass of water and should increase overall fluid intake, if able, to enhance effectiveness of the medication. Dietary fiber intake should be a minimum of 20 g daily to prevent constipation. Mineral oil and extra salt are not recommended.

14. **D.** Magnesium hydroxide (Milk of Magnesia)

Milk of Magnesia may cause hypermagnesemia in patients with renal insufficiency. The nurse should question this order with the health care provider. Bisacodyl, lubiprostone, and cascara sagrada are safe to use in patients with renal insufficiency as long as the patient is not currently dehydrated.

15. **D.** High-pitched and hyperactive above the area of obstruction

Early in intestinal obstruction, the patient's bowel sounds are hyperactive and high-pitched, sometimes referred to as "tinkling" above the level of the

obstruction. This occurs because peristaltic action increases to "push past" the area of obstruction. As the obstruction becomes complete, bowel sounds decrease and finally become absent.

16. **B.** History of colorectal polyps

A history of colorectal polyps places this patient at risk for colorectal cancer. This tissue can degenerate over time and become malignant. Osteoarthritis, lactose intolerance, and the use of herbs do not pose additional risk to the patient.

17. **B.** 8:00 AM, 12:00 PM, and 4:00 PM

A nasogastric tube should be checked for patency routinely at 4-hour intervals. Thus if the tube were inserted at 4:00 AM, it would be due to be checked at 8:00 AM, 12:00 PM, and 4:00 PM.

18. **B.** How to deep breathe and cough

Because anesthesia, an abdominal incision, and pain can impair the patient's respiratory status in the postoperative period, it is of high priority to teach the patient to cough and deep breathe. Otherwise, the patient could develop atelectasis and pneumonia, which would delay early recovery from surgery and hospital discharge. Care for the wound and location and care of the drains will be briefly discussed preoperatively, but done again with higher priority after surgery. Knowing which drugs will be used during surgery may not be meaningful to the patient and should be reviewed with the patient by the anesthesiologist.

19. **A.** impaired peristalsis.

Until peristalsis returns to normal following anesthesia, the patient may experience slowed gastrointestinal motility leading to gas pains and abdominal distention. Irritation of the bowel, nasogastric suctioning, and inflammation of the surgical site do not cause gas pains or abdominal distention.

20. **C.** Reposition the tube and check for placement.

The tube may be resting against the stomach wall. The first action by the nurse (since this is intestinal surgery and not gastric surgery) is to reposition the tube

and check it again for placement. The physician does not need to be notified unless the tube function cannot be restored by the nurse. The patient does not have bowel sounds, which is why the NG tube is in place. The NG tube would not be removed and replaced unless it was no longer in the stomach or the obstruction of the tube could not be relieved

21. **D.** "This will reduce the amount of HCl in the stomach until the nasogastric tube is removed and you can eat a regular diet again."

Famotidine is an H₂-receptor antagonist that inhibits gastric HCl secretion and thus minimizes damage to gastric mucosa while the patient is not eating a regular diet after surgery. Famotidine does not prevent air from accumulating in the stomach or stop the stomach from bleeding. Heartburn is not a side effect of general anesthesia.

22. **A.** Fecal impaction

Patients with limited mobility are at risk for fecal impactions due to constipation that may lead to liquid stool leaking around the hardened impacted feces, so assessing for fecal impaction is the priority. Perineal hygiene can be assessed at the same time. Assessing the dietary fiber and fluid intake and antidiarrheal agent use will be assessed and considered next.

23. **C, D.**

Clinical manifestations of UC and Crohn's disease include bloody diarrhea, cramping abdominal pain, and nutritional disorders. Intestinal lesions associated with UC are usually restricted to the rectum before moving into the colon. Lesions that penetrate the intestine or cause strictures are characteristic of Crohn's disease.

24. **C.** "I will have to use herbal teas instead of caffeinated drinks."

Rationale: Patients with gastroesophageal reflux disease should avoid foods (such as tea and coffee) that decrease lower esophageal pressure. Patients should also avoid milk, especially at bedtime, as it increases gastric acid secretion. Patients may eat spicy foods, unless these foods cause reflux. Small, frequent meals help prevent overdistention of the stomach, but patients should avoid late evening meals and nocturnal snacking.