CHAPTER 20. NAUSEA AND VOMITING, SELF-ASSESSMENT QUESTIONS

1. A 52-year-old man presents with chronic lower back pain that he has managed with ibuprofen 400 mg PO three times daily. He reinjured his back moving boxes and 2 days ago was started on hydrocodone 5 mg/acetaminophen 325 mg every 4 hours as needed for pain. He also has a history of hypertension and asthma for which he takes lisinopril 20 mg daily, hydrochlorothiazide 25 mg daily, fluticasone 250 mcg/salmeterol 50 mcg twice daily, and albuterol MDI two puffs as needed for shortness of breath. Today he complains of nausea with one episode of vomiting this morning. What is most likely to be causing his nausea and vomiting?

- A. Lisinopril
- B. Hydrochlorothiazide
- C. Hydrocodone
- D. Acetaminophen
- E. Fluticasone
- 2. All of the following are true regarding nausea *except*:
- A. It is an objective finding
- B. It is accompanied by tachycardia
- C. It increases salivation
- D. It is accompanied by diaphoresis
- 3. The adverse effects of doxylamine include:
- A. Salivation, diarrhea, insomnia
- B. Dry mouth, constipation, drowsiness
- C. Salivation, constipation, insomnia

- D. Dry mouth, diarrhea, drowsiness
- 4. Benzodiazepines are associated with all of the following adverse effects *except*:
- A. Respiratory depression
- B. Sedation
- C. Dyskinesia
- D. Amnesia
- 5. A 57-year-old obese woman is scheduled to undergo lengthy abdominal surgery. She smokes one pack of cigarettes per day, does not drink alcohol, and has a history of motion sickness.

Which set of risk factors predisposes this patient to postoperative nausea and vomiting (PONV)?

- A. Female sex, smoking history, and alcohol history
- B. Body habitus, history of motion sickness, and alcohol history
- C. Female gender, history of motion sickness, and duration of surgery
- D. Body habitus, smoking history, and alcohol history
- E. Female gender, history of motion sickness, and smoking history
- 6. Nonpharmacologic treatment options for motion sickness include:
- A. Increasing exposure to movement to acclimate to it more quickly
- B. Reading in a moving vehicle to distract from the motion
- C. Restricting ventilation to prevent olfactory stimulation of motion sickness
- D. Placing the head between the knees to reduce visual stimulation
- E. Sitting in the center of a boat to reduce the magnitude of the movement
- 7. Which of the following statements about aprepitant is true?
- A. It is a 5-HT₃ antagonist
- B. It is ineffective for prevention of PONV

- C. It is renally eliminated
- D. It prevents acute and delayed CINV when used with standard antiemetics
- 8. A 58-year-old man is undergoing surgical toe amputation. He does not have patient-specific risk factors for PONV, and his surgery will be short with minimal risks for PONV. He was not given PONV prophylaxis prior to the procedure but experiences nausea and vomiting in the postanesthesia care unit. The nurse asks you for a treatment recommendation. Which of the following options is the best recommendation?
- A. Diphenhydramine 25 mg orally
- B. Ondansetron 8 mg orally
- C. Scopolamine transdermal patch
- D. Granisetron 0.1 mg IV
- E. Dexamethasone 5 mg IV
- 9. A 62-year-old woman with acute myeloid leukemia is in clinic to receive her first day of cytarabine 100 mg/m² IV and daunorubicin 45 mg/m² IV, which is a moderately emetogenic, non-anthracycline/cyclophosphamide regimen. Which of the following prophylactic antiemetic regimens would be preferred for prevention of acute nausea and vomiting in this patient?
- A. Palonosetron plus dexamethasone
- B. Dolasetron plus lorazepam
- C. Metoclopramide plus dexamethasone
- D. Granisetron plus aprepitant
- E. Prochlorperazine plus dexamethasone

- 10. A 65-year-old woman is being treated for refractory chronic myelogenous leukemia (CML) with hydroxyurea. Which one of the following antiemetic regimens would be the most appropriate to administer prior to the hydroxyurea dose for preventing CINV?
- A. Granisetron plus dexamethasone plus aprepitant
- B. Palonosetron plus dexamethasone
- C. Dexamethasone
- D. Metoclopramide
- E. No prophylaxis is required
- 11. A 69-year-old woman with non–small-cell lung cancer is scheduled to receive her first cycle of cisplatin 100 mg/m² plus gemcitabine 1000 mg/m². Which of the following oral regimens would be most appropriate for preventing acute *and* delayed nausea and vomiting?
- A. Ondansetron, dexamethasone, and aprepitant on days 1–4
- B. Ondansetron, dexamethasone, and aprepitant on day 1
- C. Ondansetron and dexamethasone on day 1, and aprepitant on days 1–4
- D. Ondansetron day 1, dexamethasone days 1–4, and aprepitant day 1
- E. Ondansetron day 1, dexamethasone days 1–4, and aprepitant days 1–3
- 12. A 50-year-old woman had a hysterectomy and now presents with an abdominal abscess. She has a history of diabetes, gastroparesis, hypertension, and dyslipidemia. Her home medications are metformin, glipizide, erythromycin, ramipril, and simvastatin. Which one of the patient's medications makes droperidol contraindicated for PONV?
- A. Simvastatin
- B. Erythromycin
- C. Metformin

- D. Ramipril
- E. Glipizide
- 13. A 30-year-old woman is going deep-sea fishing this weekend. The last time she went on a similar excursion, she got seasick about an hour after leaving port and shortly after drinking three margaritas and eating several tacos. She asks you to recommend something to help prevent seasickness. What is the best recommendation?
- A. Apply a transdermal scopolamine patch 1 hour before the trip
- B. Take granisetron one mg orally 4 hours before the trip
- C. Take aprepitant 40 mg orally 3 hours before the trip
- D. Take meclizine 50 mg orally if nausea or vomiting occurs
- E. Take methylprednisolone 8 mg orally if nausea or vomiting occurs
- 14. A 26-year-old woman in her first trimester of pregnancy (week 9) is experiencing severe nausea and vomiting that is interfering with her ability to maintain an acceptable level of nutrition. Which one of the following antiemetic regimens would be the most appropriate?
- A. Methylprednisolone 12 mg orally twice daily as needed
- B. Droperidol 0.625 mg orally every 12 hours as needed
- C. Doxylamine 10 mg/pyridoxine 10mg, two tablets at bedtime
- D. Dolasetron 100 mg orally every 8 hours as needed
- E. Dronabinol 5–15 mg/m² every 2–4 hours as needed
- 15. The vestibular system is replete with which types of receptors?
- A. Histaminic
- B. Dopaminergic
- C. Neurokinin-1

D. Serotonergic

E. Adrenergic

ANSWERS

- 1. C
- 2. A
- 3. B
- 4. C
- 5. C
- 6. E
- 7. D
- 8. D
- 9. A
- 10. E
- 11. E
- 12. B
- 13. A
- 14. C
- 15. A