

## Chapter 76, Self-Assessment Questions

1. A 2-month-old male child is brought to the hospital 2 days after onset of a very watery diarrhea. His weight is noted to be 12.5 lb (5.7 kg), which is decreased from his previous recorded weight of 15 lb (6.8 kg). His blood pressure is low and his heart rate is increased. His fontanelle and eye orbits are noted to be deeply sunken and tears are absent. His extremities are cool and mottled and his urine output is less than 1 mL/kg/h. He is noted to be lethargic upon presentation. Which one of the following therapies would be most appropriate for this patient:
  - A. ORT at 50 mL/kg over 2 to 4 hours
  - B. ORT at 100 mL/kg over 2 to 4 hours
  - C. D5W at 100 mL/h for 2 hours; then reassess fluid status
  - D. Lactated Ringers at 250 mL/h for at least 6 hours
  - E. Lactated Ringers at 20 mL/kg over 15 to 20 minutes and repeat as necessary
2. A 4-year-old child with a 3-day history of viral gastroenteritis presents to his local medical clinic with signs of severe dehydration secondary to multiple vomiting episodes. Which one of the following antiemetic agents should be considered for the treatment of this child:
  - A. Aprepitant
  - B. Dexamethasone
  - C. Diphenhydramine
  - D. Dolasetron
  - E. Ondansetron
3. Which one of the following is *least* likely to be associated with shigellosis:
  - A. Bacteremia
  - B. Dysentery
  - C. Fractional Stools
  - D. Tenesmus
  - E. Vomiting
4. Antimicrobial agents are contraindicated in which of the following infections because they may induce the expression and release of toxin, which may predispose a patient to develop hemolytic-uremic syndrome (HUS):
  - A. Cholera
  - B. Cryptosporidiosis
  - C. Enterohemorrhagic E. coli
  - D. Enterotoxigenic E. coli
  - E. Salmonellosis
5. All of the following could be considered for the treatment of a patient with shigellosis *except*:
  - A. Azithromycin
  - B. Ceftriaxone
  - C. Ciprofloxacin
  - D. Fidaxomicin
  - E. Levofloxacin
6. Two days after disembarking from a cruise ship, a 26-year-old woman presents to her local medical clinic complaining of abdominal cramping and vomiting for the past 36 hours. She states that she noted some watery diarrhea that developed the last day or so of her cruise, but now the stools are of smaller volume, but appear to be bloody. A presumptive diagnosis of shigellosis is made. Which one of the following therapies should be recommended:

- A. Levofloxacin
  - B. Loperamide
  - C. Metronidazole
  - D. Trimethoprim-Sulfamethoxazole
  - E. No antibiotic therapy is indicated for this infection
7. Rifaximin is approved for the treatment of Traveler diarrhea (TD) caused by which one of the following organisms:
- A. Campylobacter
  - B. Enterohemorrhagic *E. coli*
  - C. Enterotoxigenic *E. coli*
  - D. Salmonella
  - E. Shigella
8. A vaccine is available in the United States for which one of the following infections:
- A. *C. difficile* enterocolitis
  - B. Enterohemorrhagic *E. coli*
  - C. Shigellosis
  - D. Traveler diarrhea
  - E. Typhoid fever
9. A 36-year-old woman presents with a 3-day history of high fevers, headaches, and bloody diarrhea. She also reports fairly significant abdominal pain and states that she thinks she might have appendicitis. She reports eating some chicken that may have been undercooked a few days previously. She also takes a proton-pump inhibitor on a daily basis for gastroesophageal reflux disease. Which one of the following should be recommended for the treatment of this patient:
- A. Azithromycin
  - B. Levofloxacin
  - C. Metronidazole
  - D. Trimethoprim-Sulfamethoxazole
  - E. No antibiotic therapy is indicated for this infection
10. Which one of the following is the preferred first-line drug for a patient infected with *S. typhi*:
- A. Ceftriaxone
  - B. Ciprofloxacin
  - C. Erythromycin
  - D. Metronidazole
  - E. Trimethoprim-Sulfamethoxazole
11. The cornerstone of treatment for a patient with cholera is:
- A. Azithromycin
  - B. Glucose-based ORT
  - C. Intravenous 0.9% NaCl
  - D. Metronidazole
  - E. Rice-based ORT
12. Which statement is *false* regarding *C. difficile* enterocolitis:
- A. It is caused by a gram-positive, spore-forming anaerobic organism
  - B. A more virulent strain is now associated with many outbreaks
  - C. Toxin production is essential for disease to occur

- D. More than 90% of cases occur during or following antimicrobial therapy
  - E. Infections only occur in patients who have been recently hospitalized
13. The only FDA-approved agent for the treatment of cryptosporidiosis is:
- A. Azithromycin
  - B. Fidaxomicin
  - C. Nitazoxanide
  - D. Paromomycin
  - E. Rifaximin
14. A patient who is on a 2-week business trip to Mexico develops an acute onset of profuse, watery diarrhea that does not appear to be bloody. He is not experiencing any abdominal cramping and no fever is present. However, the diarrhea is interfering with his scheduled business meetings. Which one of the following therapeutic options should be recommended:
- A. Doxycycline alone
  - B. Loperamide + Doxycycline
  - C. Loperamide alone
  - D. Loperamide + Levofloxacin
  - E. Fidaxomicin alone
15. A 66-year-old man, who has been in the ICU for 2 weeks, has recently completed a course of broad-spectrum antibiotics for ventilator-associated pneumonia. He has now developed a severe case of diarrhea that is noted to be profuse, watery, and greenish in color. He has a new-onset high fever, his white blood cell count has increased to  $27,000/\text{mm}^3$  ( $27 \times 10^9/\text{L}$ ), and his serum creatinine has increased to 1.8 mg/dL ( $159 \mu\text{mol}/\text{L}$ ) from a baseline of 1.0 mg/dL ( $88 \mu\text{mol}/\text{L}$ ). According to current clinical practice guidelines, which one of the following therapies should be recommended:
- A. Metronidazole 500 mg (by mouth) three times daily
  - B. Metronidazole 500 mg (by mouth) three times daily + Loperamide after each loose stool
  - C. Vancomycin 125 mg (by mouth) four times daily
  - D. Vancomycin 125 mg (by mouth) four times daily + Loperamide after each loose stool
  - E. Vancomycin 1 gram (IVPB) every 12 hours
16. All of the following therapeutic options may be recommended for second or later recurrences of *C. difficile* infection (CDI) or for prevention of recurrent CDI episodes *except*:
- A. Fidaxomicin
  - B. Metronidazole
  - C. Rifaximin
  - D. Tapered or pulsed oral vancomycin
  - E. Fecal microbiota transplantation

## Answers

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