Chapter 82, Self-Assessment Questions

1. AB is a 75-year-old patient who presents from his nursing home with a urinary tract infection. He is febrile with a temperature of 39.1°C, a heart rate of 102 beats/min, respiratory rate of 12 breaths/min, and a blood pressure of 135/75 mm Hg. Which of the following does AB meet criteria for?
   - A. Systemic inflammatory response syndrome (SIRS)
   - B. Bacteremia
   - C. Septic shock
   - D. Disseminated intravascular coagulation (DIC)

2. Select the laboratory test(s) that should be ordered for AB.
   - A. Complete blood count with differential
   - B. Comprehensive metabolic panel
   - C. Urinalysis with culture and gram stain
   - D. All of the above

3. AB’s blood pressure begins to decline. His current blood pressure is 101/50 mm Hg and you wish to administer a fluid challenge. What type of fluid(s) do you recommend?
   - A. 25% albumin
   - B. Crystalloids
   - C. Hydroxyethyl starch
   - D. 5% dextrose

4. Select the target goal for fluid resuscitation.
   - A. Central venous pressure 8 to 12 mmHg (1.1–1.6 kPa)
   - B. Mean arterial pressure greater than or equal to 65 mm Hg (8.6 kPa)
   - C. Urine output greater than or equal to 0.5 mL/kg/h
   - D. All of the above

5. AB is diagnosed with a urinary tract infection and is ordered to start antibiotics. What should be ordered and completed prior to initiation of antibiotics (if possible)?
   - A. Stress ulcer prophylaxis
   - B. DVT prophylaxis
   - C. Microbiologic cultures
   - D. Norepinephrine

6. Despite appropriate fluid resuscitation, AB remains hypotensive and his current blood pressure is 90/45 mm Hg. Which vasopressor agent do you recommend to initiate?
   - A. Norepinephrine
   - B. Dopamine
   - C. Epinephrine
   - D. Phenylephrine

7. After initiating norepinephrine, AB continues to require increasing dose titrations and his MAP remains < 65 mm Hg (8.6 kPa). What other therapies can you consider adding?
   - A. Heparin
   - B. Hydrocortisone
   - C. Pantoprazole
   - D. Albumin

8. If utilized, what daily dose of hydrocortisone is recommended?
A. 50 mg IV  
B. 200 mg IV  
C. 300 mg IV  
D. 500 mg IV

9. The nurse approaches you to let you know that AB’s last blood glucose measurements have been high. His last two readings over the past 6 hours are 195 mg/dL (10.8 mmol/L) and 254 mg/dL (14.1 mmol/L). The nurse tells you that when she alerted the physician he told her that septic patients are often hyperglycemic and do not need intervention. What is the most appropriate recommendation?
   A. Agree with the physician, no intervention needed
   B. When blood glucose measurements have been greater than 150 mg/dL (8.3 mmol/L) for 24 hours, initiate therapy with sliding scale insulin
   C. When two consecutive blood glucose measurements are greater than 180 mg/dL (10.0 mmol/L), initiate therapy with continuous infusion of regular insulin to maintain blood glucose levels between 140 and 180 mg/dL (7.8 and 10.0 mmol/L).
   D. When two consecutive blood glucose measurements are greater than 180 mg/dL (10.0 mmol/L), initiate therapy with continuous infusion of regular insulin to maintain blood glucose levels between 80 and 110 mg/dL (4.4 and 6.1 mmol/L).

10. Which of the following is/are potential complications of sepsis?
   A. AKI
   B. ARDS
   C. DIC
   D. All of the above

11. What is the threshold for the transfusion of red blood cells in patients with no other compelling indications?
   A. Less than 7 gm/dL (70 g/L; 4.34 mmol/L)
   B. Less than 10 gm/dL (100 g/L; 6.21 mmol/L)
   C. Less than 12 gm/dL (120 g/L; 7.45 mmol/L)
   D. Less than 15 gm/dL (150 g/L; 9.31 mmol/L)

12. Select the sepsis complication that would alter the dose of renally eliminated medications.
   A. ARDS
   B. DIC
   C. AKI
   D. Thrombocytopenia

13. What other adjunctive therapies should be initiated in mechanically ventilated patients with sepsis who do not have contraindications?
   A. Deep vein thrombosis prophylaxis
   B. Stress ulcer prophylaxis
   C. Sodium bicarbonate therapy
   D. A and B

14. AB’s blood pressure has improved over the last 3 days and he is off vasopressors. What other therapy should be weaned at this time?
   A. Heparin
   B. Antimicrobial therapy
C. Hydrocortisone
D. Pantoprazole

15. Which of the following interventions have been associated with decreased mortality rates in septic patients?
   A. Administration of intravenous hydrocortisone 200 mg daily as soon as shock is recognized
   B. Appropriate antimicrobials administered within the first hour
   C. Tight glycemic control targeting a blood glucose range of 80 to 110 mg/dL (4.4–6.1 mmol/L)
   D. A and B
Answers

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