CHAPTER 26

Hematology and Nephrology

HANDOUT 26-2: Evaluating Content Mastery  Student’s Name

EVALUATION

CHAPTER 26 QUIZ

Write the letter of the best answer in the space provided.

_____ 1. Blood cells that transport oxygen to the cells of the body are:
   A. blue.  C. red.
   B. purple. D. white.

_____ 2. Blood cells that are critical in response to infection and mediate the body’s immune response are:
   A. red.  C. white.
   B. blue. D. amber.

_____ 3. The part of blood responsible for clotting:
   A. plasma.  C. platelets.
   B. WBC’s. D. RBC’s.

_____ 4. The liquid part of blood is called:
   A. hemoglobin.  C. WBC’s.
   B. RBC’s. D. plasma.
5. A disease caused by a genetic defect in a patient’s hemoglobin is called:
   A. sickle cell anemia.  
   B. lymphoma.  
   C. anemia.  
   D. hemophilia.

6. Patients whose kidneys can no longer provide filtration and fluid balance have:
   A. acute renal failure.  
   B. end stage renal disease.  
   C. chronic renal failure.  
   D. pyelonephritis.

7. Renal patients whose blood is filtered through a specialized machine are undergoing:
   A. hemodialysis.  
   B. transfusion.  
   C. peritoneal dialysis.  
   D. CAPD.

8. The vibration that can be felt by the EMT when a patient’s A-V fistula is gently palpated is called:
   A. thrill.  
   B. whirl.  
   C. woosh.  
   D. pulse.

9. The extreme pain felt by sickle cell patients during a crisis results primarily from the sludging and accumulation of:
   A. white blood cells.  
   B. plasma.  
   C. red blood cells.  
   D. platelets.

10. End stage renal patients who miss their dialysis treatments are at high
risk for:

A. acute COPD.

B. cardiac arrest.

C. acute bronchoconstriction.

D. cardiac tamponade.
REINFORCEMENT

IN THE FIELD

Review the following real-life situation. Then answer the questions that follow.

A. You are dispatched at 17:00 hours for a sick case. Upon arrival, you find a 68-year-old African American female sitting in her lounge chair in the living room. The patient is complaining of feeling sick. Upon further questioning she tells you that she is having difficulty breathing. Her daughter states that she has chronic renal failure and hypertension and missed her dialysis appointment yesterday because it was raining. After performing the primary assessment, you obtain vital signs of blood pressure: 168/90, pulse: 120, respiratory rate: 28, and room oxygen saturation of 94 percent. Lung sounds are wet in the lower fields and you notice her ankles and wrists are swollen. You observe a fistula (shunt) in the right wrist:

1. What pathophysiologic condition or conditions would explain the patient’s vital signs?

2. What specific precautions need to be taken when obtaining the vital signs?

3. How will you treat this patient?
CHAPTER 26 REVIEW

Write the word or words that best complete each sentence in the space provided.

1. A person who lacks a normal number of red blood cells is said to be __________________________.

2. Patients with sickle cell anemia have abnormal, sickle-shaped __________________________
   __________________________.

3. __________________________ __________________________ is described as the loss of the kidneys to filter
   the blood and remove toxins and excess fluids from the body.

4. __________________________ is the liquid part of blood that transports nutrients.

5. Patients with end stage renal disease will require __________________________.

6. The two primary types of dialysis are __________________________ and
   __________________________.

7. ESRF patients who miss a dialysis treatment may have symptoms very similar to
   __________________________ __________________________ __________________________.

8. The most commonly transplanted organ is the __________________________.

9. Renal patients in cardiac arrest may not respond to treatments with the __________________________
   __________________________.

10. Sickle cell patients are at higher risk of having the __________________________ destroyed by the disease.
TRUE OR FALSE

______ 1. White blood cells transport oxygen to the cells of the body.
______ 2. Sickle cell anemia is an inherited disease.
______ 3. Patients with lower than normal red blood cell counts have anemia.
______ 4. Patients with anemia often have sickle cell crises.
______ 5. Patients with end stage renal failure do not require dialysis.
______ 6. Patients experiencing a sickle cell crisis do not experience severe pain.
______ 7. End-stage renal patients often miss their dialysis appointments.
______ 8. Sickle cell anemia results in the destruction of the kidneys.
______ 9. End-stage renal patients in cardiac arrest may not respond to shocks from an AED.
______ 10. Blood pressures can be taken in the arm with a fistula.
HEMATOLOGY AND NEPHROLOGY LISTING

Complete the following lists.

1. List four components of blood.

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2. List five complications from sickle cell anemia.

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3. List four signs and symptoms that patients who miss their dialysis treatment may exhibit.

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4. List the four steps the EMT should take in treating a sickle cell patient.

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