

EMT

Chapter 10 Review

1. The term “shock” is MOST accurately defined as:

- A. a decreased supply of oxygen to the brain.
- B. cardiovascular collapse leading to inadequate perfusion.
- C. decreased circulation of blood within the venous circulation.
- D. decreased function of the respiratory system leading to hypoxia.

Answer: B

Response: Shock, or hypoperfusion, refers to a state of collapse and failure of the cardiovascular system, or any one of its components (eg, heart, vasculature, blood volume), which leads to inadequate perfusion of the body's cells and tissues.

1. The term “shock” is MOST accurately defined as:

A. a decreased supply of oxygen to the brain.

Rationale: It may be a result of inadequate perfusion, but it is not the definition of shock.

B. cardiovascular collapse leading to inadequate perfusion.

Rationale: Correct answer

1. The term “shock” is MOST accurately defined as:
 - C. decreased circulation of blood within the venous circulation.
Rationale: It may be a result of cardiovascular collapse, but it is not the definition of shock.
 - D. decreased function of the respiratory system leading to hypoxia.
Rationale: Decreased function of the respiratory system will lead to hypoxia, which will cause cardiovascular collapse and eventually shock.

2. Anaphylactic shock is typically associated with:

- A. urticaria.
- B. bradycardia.
- C. localized welts.
- D. a severe headache.

Answer: A

Rationale: Urticaria (hives) is typically associated with allergic reactions—mild, moderate, and severe. They are caused by the release of histamines from the immune system. In anaphylactic shock, urticaria is also accompanied by cool, clammy skin; tachycardia; severe respiratory distress; and hypotension.

2. Anaphylactic shock is typically associated with:

A. urticaria.

Rationale: Correct answer

B. bradycardia.

Rationale: Tachycardia, not bradycardia, is a symptom of anaphylactic shock.

2. Anaphylactic shock is typically associated with:

C. localized welts.

Rationale: Welts are a raised ridge or bump on the skin caused by a lash from a whip, a scratch, or a similar blow.

D. a severe headache.

Rationale: Altered mental status secondary to hypoxia may be a symptom, but not a headache.

3. Signs of compensated shock include all of the following, EXCEPT:

A. restlessness or anxiety.

B. pale, cool, clammy skin.

C. a feeling of impending doom.

D. weak or absent peripheral pulses.

Answer: D

Rationale: In compensated shock, the body is able to maintain perfusion to the vital organs of the body via the autonomic nervous system. Signs include pale, cool, clammy skin; restlessness or anxiety; a feeling of impending doom; and tachycardia. When the body's compensatory mechanism fails, the patient's blood pressure falls; weak or absent peripheral pulses indicates this.

3. Signs of compensated shock include all of the following, EXCEPT:

A. restlessness or anxiety.

Rationale: This indicates compensated shock.

B. pale, cool, clammy skin.

Rationale: This indicates compensated shock.

C. a feeling of impending doom.

Rationale: This indicates compensated shock and the anxiety associated with it.

D. weak or absent peripheral pulses.

Rationale: Correct answer

4. When treating a trauma patient who is in shock, LOWEST priority should be given to:
- A. spinal protection.
 - B. thermal management.
 - C. splinting fractures.
 - D. notifying the hospital.

Answer: C

Rationale: Critical interventions for a trauma patient in shock include spinal precautions, high-flow oxygen (or assisted ventilation), thermal management, rapid transport, and early notification of a trauma center. Splinting fractures should not be performed at the scene if the patient is critically injured; it takes too long and only delays transport.

4. When treating a trauma patient who is in shock, LOWEST priority should be given to:

A. spinal protection.

Rationale: Stabilization of the spine must take place during the first interaction with a trauma patient.

B. thermal management.

Rationale: Preventing hypothermia is standard treatment.

4. When treating a trauma patient who is in shock, LOWEST priority should be given to:

C. splinting fractures.

Rationale: Correct answer

D. notifying the hospital.

Rationale: Trauma centers need to be notified early during patient interaction and transport.

5. Potential causes of cardiogenic shock include all of the following EXCEPT:

- A. inadequate heart function.
- B. disease of muscle tissue.
- C. severe bacterial infection.
- D. impaired electrical system.

Answer: C

Rationale: Cardiogenic shock is caused by inadequate function of the heart, or pump failure. Within certain limits, the heart can adapt to these problems. If too much muscular damage occurs, however, as sometimes happens after a heart attack, the heart no longer functions well. Other causes include disease, injury, and an impaired electrical system.

5. Potential causes of cardiogenic shock include all of the following EXCEPT:

A. inadequate heart function.

Rationale: This is a cause of cardiogenic shock.

B. disease of muscle tissues.

Rationale: This is a cause of cardiogenic shock.

C. severe bacterial infection.

Rationale: Correct answer.

D. impaired electrical system.

Rationale: This is a cause of cardiogenic shock.

6. A 60-year-old woman presents with a BP of 80/60 mm Hg, a pulse rate of 110 beats/min, mottled skin, and a temperature of 103.9°F. She is MOST likely experiencing:
- A. septic shock.
 - B. neurogenic shock.
 - C. profound heart failure.
 - D. a severe viral infection.

Answer: A

Rationale: In septic shock, bacterial toxins damage the blood vessel walls, causing them to leak and rendering them unable to constrict. Widespread dilation of the vessels, in combination with plasma loss through the injured vessel walls, results in shock. A high fever commonly accompanies a bacterial infection.

6. A 60-year-old woman presents with a BP of 80/60 mm Hg, a pulse rate of 110 beats/min, mottled skin, and a temperature of 103.9°F. She is MOST likely experiencing:

A. septic shock.

Rationale: Correct answer

B. neurogenic shock.

Rationale: Neurogenic shock is an injury to the nervous system and shows bradycardia and hypotension—not fever.

6. A 60-year-old woman presents with a BP of 80/60 mm Hg, a pulse rate of 110 beats/min, mottled skin, and a temperature of 103.9°F. She is MOST likely experiencing:

C. profound heart failure.

Rationale: This is part of cardiogenic shock, associated with low blood pressure, weak pulse, and cyanotic skin.

D. a severe viral infection.

Rationale: Septic shock is caused by a bacterial infection.

7. A patient with neurogenic shock would be LEAST likely to present with:
- A. tachypnea.
 - B. hypotension.
 - C. tachycardia.
 - D. altered mentation.

Answer: C

Rationale: In neurogenic shock, the nerves that control the sympathetic nervous system are compromised. The nervous system is responsible for secreting the hormones epinephrine and norepinephrine, which increase the patient's heart rate, constrict the peripheral vasculature, and shunt blood to the body's vital organs. Without the release of these hormones, the compensatory effects of tachycardia and peripheral vasoconstriction are absent.

7. A patient with neurogenic shock would be LEAST likely to present with:

A. tachypnea.

Rationale: Respirations increase to compensate for the hypoxia associated with shock.

B. hypotension.

Rationale: Hypotension results from massive vasodilation.

7. A patient with neurogenic shock would be LEAST likely to present with:

C. tachycardia.

Rationale: Correct answer

D. altered mentation.

Rationale: The patient will present with mental status changes secondary to hypoxia.

8. A 20-year-old man was kicked numerous times in the abdomen during an assault. His abdomen is rigid and tender, his heart rate is 120 beats/min, and his respirations are 30 breaths/min. You should treat this patient for:
- A. a lacerated liver.
 - B. a ruptured spleen.
 - C. respiratory failure.
 - D. hypovolemic shock.

Answer: D

Rationale: The patient may have a liver laceration or ruptured spleen—both of which can cause internal blood loss. However, it is far more important to recognize that the patient is in hypovolemic shock and to treat him accordingly.

8. A 20-year-old man was kicked numerous times in the abdomen during an assault. His abdomen is rigid and tender, his heart rate is 120 beats/min, and his respirations are 30 breaths/min. You should treat this patient for:

A. a lacerated liver.

Rationale: You cannot treat a lacerated liver in the field. You can treat the symptoms of hypovolemic shock associated with the injury.

B. a ruptured spleen.

Rationale: You cannot treat a ruptured spleen in the field. You can treat the symptoms of hypovolemic shock associated with the injury.

8. A 20-year-old man was kicked numerous times in the abdomen during an assault. His abdomen is rigid and tender, his heart rate is 120 beats/min, and his respirations are 30 breaths/min. You should treat this patient for:

C. respiratory failure.

Rationale: If you treat the hypovolemic shock, then you will treat the respiratory compromise as well.

D. hypovolemic shock.

Rationale: Correct answer

9. A 33-year-old woman presents with a generalized rash, facial swelling, and hypotension approximately 10 minutes after being stung by a hornet. Her BP is 70/50 mm Hg and her heart rate is 120 beats/min. In addition to high-flow oxygen, this patient is in MOST immediate need of:
- A. epinephrine.
 - B. rapid transport.
 - C. an antihistamine.
 - D. IV fluids.

Answer: A

Rationale: This patient is in anaphylactic shock—a life-threatening overexaggeration of the immune system that results in bronchoconstriction and hypotension. After ensuring adequate oxygenation and ventilation, the MOST important treatment for the patient is epinephrine, which dilates the bronchioles and constricts the vasculature, thus improving breathing and blood pressure, respectively.

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A. epinephrine.

Rationale: Correct answer

B. rapid transport.

Rationale: Rapid transport follows high-flow oxygen and epinephrine administration.

9. A 33-year-old woman presents with a generalized rash, facial swelling, and hypotension approximately 10 minutes after being stung by a hornet. Her BP is 70/50 mm Hg and her heart rate is 120 beats/min. In addition to high-flow oxygen, this patient is in MOST immediate need of:

C. an antihistamine.

Rationale: This is an ALS treatment.

D. IV fluids.

Rationale: This is an ALS treatment.

10. Perfusion is the circulation of blood in:

- A. adequate amounts.
- B. inadequate amounts.
- C. excessive amounts.
- D. the brain.

Answer: A

Rationale: Perfusion is the circulation of blood within organs and tissues in adequate amounts to meet the cells' current needs.

10. Perfusion is the circulation of blood in:

A. adequate amounts.

Rationale: Correct answer

B. inadequate amounts.

Rationale: Perfusion is the circulation of blood in adequate amounts.

C. excessive amounts.

Rationale: Perfusion is the circulation of blood in adequate amounts.

D. the brain.

Rationale: Perfusion is the circulation of blood in organs and tissues.