New York State Basic Emergency Medical Technician (EMT-B) Practice Exam (Sample)

Study Guide

Everything you need from our exam experts!

Questions

1. What is the best definition of auscultation?

- **A. Listening**
- **B. Feeling**
- **C. Measuring**
- **D. Observing**

2. What anatomical term indicates the front of the body?

- **A. Posterior**
- **B. Ventral**
- **C. Anterior**
- **D. Distal**

3. A patient in acute respiratory distress requiring oxygen therapy is LEAST likely to show which of the following symptoms?

- **A. Anxiety**
- **B. Nasal flaring**
- **C. Intercostal muscle retractions**
- **D. Slow pulse rate**

4. What does a sunken fontanelle in an infant indicate?

- **A. Normal hydration status**
- **B. Intracranial pressure**
- **C. Dehydration**
- **D. Airway obstruction**

5. What should you do immediately after opening the airway of a patient who is unconscious and showing slow respirations?

- **A. Begin chest compressions**
- **B. Insert an airway adjunct and ventilate with 100% oxygen using a BVM**
- **C. Call for advanced medical support**
- **D. Administer glucose orally**

6. What is considered a critical burn injury?

- **A. Burns of the arms.**
- **B. Full thickness burns involving the trunk.**
- **C. Partial thickness burns on limbs.**
- **D. Burns on lower extremities only.**

7. Why is it important to keep the heel of the hand lightly in contact with the chest during chest compressions?

- **A. To prevent injury**
- **B. To ensure correct hand position**
- **C. To monitor patient response**
- **D. To increase speed of compressions**

8. What are the signs of a severe allergic reaction?

- **A. Decreased BP, itching, swelling, difficulty breathing**
- **B. Pain in chest, rapid pulse, pallor, sweating**
- **C. Decreased BP strong pulse, heavy breathing**
- **D. Increased heart rate, rash, headache, fatigue**

9. When spinal injuries are suspected, the EMS provider should FIRST:

- **A. Hyperextend the neck to secure the airway**
- **B. Determine the extent of the paralysis**
- **C. Apply an extrication collar**
- **D. Apply manual stabilization and secure the airway**

10. For a trauma victim with a respiratory rate of 40/min, shallow and irregular, who is pale and has a history of emphysema, the MOST APPROPRIATE treatment would be to:

- **A. Use a BVM with supplemental oxygen**
- **B. Administer low-concentration oxygen because of emphysema history**
- **C. Administer supplemental oxygen with a high-concentration mask**
- **D. Transport the patient sitting up to ease the patient's dyspnea**

Answers

1. A
2. C
3. D
4. C
5. B
6. B
7. B
8. A
9. D
10. A

Explanations

1. What is the best definition of auscultation?

A. Listening

B. Feeling

C. Measuring

D. Observing

Auscultation is best defined as the act of listening to the sounds made by internal organs, typically using a stethoscope. It is a crucial component of a physical examination, primarily used to assess the health of a patient. By listening to the heart, lungs, and intestines, healthcare professionals can gather important information about a patient's condition, detecting abnormalities such as abnormal heart sounds, breath sounds, or bowel sounds. While other terms like "feeling" or "measuring" pertain to different senses and skills involved in patient evaluation, they do not capture the specific auditory focus of auscultation. Observing may involve visual assessment or inspection but lacks the auditory element that auscultation uniquely emphasizes. Thus, the emphasis on "listening" precisely defines the key aspect of auscultation in clinical practice.

2. What anatomical term indicates the front of the body?

A. Posterior

B. Ventral

C. Anterior

D. Distal

The term that indicates the front of the body is "anterior." In anatomical terminology, "anterior" refers to the positioning that is toward the front of the body when in the standard anatomical position, which is standing upright with arms at the sides and palms facing forward. This serves as a foundational concept in understanding human anatomy and is essential for effectively communicating the locations of structures or injuries. "Ventral" also refers to a similar concept as it often pertains to the belly side of an organism, but "anterior" specifically denotes the front in a more general context applicable to humans. "Posterior" describes the back of the body, while "distal" indicates a position further from the point of attachment or origin (such as the limbs relative to the torso). Understanding these terms provides clarity in describing anatomical locations and is crucial for EMTs when assessing and communicating about patients.

3. A patient in acute respiratory distress requiring oxygen therapy is LEAST likely to show which of the following symptoms?

A. Anxiety

B. Nasal flaring

C. Intercostal muscle retractions

D. Slow pulse rate

In cases of acute respiratory distress, the body typically exhibits various signs and symptoms related to the struggle for adequate oxygenation. Anxiety is common as patients may feel a sense of panic due to the inability to breathe easily. Nasal flaring and intercostal muscle retractions are also prevalent; these are physiological responses that indicate increased work of breathing as the body attempts to compensate for decreased oxygen levels. A slow pulse rate, on the other hand, is less likely to present in patients experiencing acute respiratory distress. Typically, individuals in respiratory distress will experience tachycardia, or a fast heart rate, as the body is in a state of stress and is trying to circulate oxygen more efficiently to vital organs. Therefore, the symptom of a slow pulse rate is inconsistent with what is expected in acute respiratory distress situations, making it the least likely symptom to be observed in such a patient.

4. What does a sunken fontanelle in an infant indicate?

A. Normal hydration status

B. Intracranial pressure

C. Dehydration

D. Airway obstruction

A sunken fontanelle in an infant is a key indicator that points to dehydration. The fontanelles, which are the soft spots on an infant's skull, normally appear flat or slightly bulging when the child is well-hydrated. However, when hydration levels drop, the body's ability to retain fluid can result in a sunken appearance of these areas, reflecting a lack of adequate fluid volume. Dehydration can occur due to various reasons, such as illness, diarrhea, vomiting, or insufficient fluid intake. In infants, this condition can quickly lead to more severe health issues, making recognition of a sunken fontanelle crucial. Monitoring fontanelles is a common practice in pediatric assessments as they offer important clues regarding an infant's fluid status and overall health.

5. What should you do immediately after opening the airway of a patient who is unconscious and showing slow respirations?

A. Begin chest compressions

B. Insert an airway adjunct and ventilate with 100% oxygen using a BVM

C. Call for advanced medical support

D. Administer glucose orally

The correct approach after opening the airway of an unconscious patient who is exhibiting slow respirations is to insert an airway adjunct and ventilate with 100% oxygen using a bag-valve-mask (BVM) device. This answer emphasizes the importance of ensuring adequate ventilation and oxygenation in a patient who may be unable to breathe effectively on their own. When the airway is opened, it is crucial to assess the patient's ability to sustain adequate respiratory function. Slow respirations indicate that the patient may not be breathing effectively or may be at risk for respiratory failure. In such a case, using a BVM provides a means to deliver positive pressure ventilation, ensuring that oxygen reaches the lungs efficiently. Using an airway adjunct, such as an oropharyngeal or nasopharyngeal airway, helps maintain a clear airway, preventing further obstruction, particularly if the patient has reduced consciousness levels. The other options do not adequately address the immediate airway and ventilation needs of this patient. For instance, performing chest compressions is appropriate for a patient in cardiac arrest, but in this scenario, the patient is still exhibiting some respiratory effort, albeit slow. Calling for advanced medical support, while important, should occur alongside immediate care interventions rather than as a first action. Administer

6. What is considered a critical burn injury?

A. Burns of the arms.

B. Full thickness burns involving the trunk.

C. Partial thickness burns on limbs.

D. Burns on lower extremities only.

A critical burn injury is defined primarily by the depth and extent of the burn as well as the location on the body. Full thickness burns, also known as third-degree burns, extend through all layers of the skin and can damage underlying tissues. When these burns involve the trunk, they pose significant risks because the trunk contains vital organs and plays a crucial role in regulating body temperature and providing support for bodily functions. Injuries in this area can lead to severe complications such as fluid loss, infection, and potentially life-threatening systemic responses. The serious underlying damage caused by full thickness burns over such a large and critical area emphasizes the need for immediate and advanced medical treatment. Therefore, burns involving the trunk are recognized as part of the criteria for critical burn injuries due to their potential for serious consequences and the urgent care they require. In contrast, other types of burn injuries listed, such as burns of the arms or partial thickness burns on limbs, generally do not carry the same level of risk for systemic problems or complications as full thickness burns on the trunk. Burns limited to the lower extremities, while potentially serious, are typically less critical than those involving more central areas of the body like the trunk.

7. Why is it important to keep the heel of the hand lightly in contact with the chest during chest compressions?

A. To prevent injury

B. To ensure correct hand position

C. To monitor patient response

D. To increase speed of compressions

Keeping the heel of the hand lightly in contact with the chest during chest compressions is important to ensure correct hand position. Maintaining proper hand placement is crucial because it allows for effective compressions that are both deep and at the appropriate rate. When the hands are positioned correctly on the chest, this maximizes the efficiency of blood flow during each compression. It also helps to maintain the same location on the chest, which is vital for consistent compressions throughout the resuscitation process. Proper hand positioning reduces the risk of compressing the stomach or ribs accidentally, which can compromise the effectiveness of CPR and potentially cause injury to the patient. Additionally, being aware of the hand position ensures that the compressions are delivered in the center of the chest, directly over the sternum, where the heart is located, maximizing the chances of adequate circulation during cardiac arrest.

8. What are the signs of a severe allergic reaction?

A. Decreased BP, itching, swelling, difficulty breathing

B. Pain in chest, rapid pulse, pallor, sweating

C. Decreased BP strong pulse, heavy breathing

D. Increased heart rate, rash, headache, fatigue

The signs of a severe allergic reaction, also known as anaphylaxis, typically include decreased blood pressure, itching, swelling, and difficulty breathing. When an individual experiences anaphylaxis, the immune system releases a surge of chemicals that can lead to a sudden drop in blood pressure. This is often accompanied by the swelling of tissues, particularly around the throat, which can obstruct the airway and cause difficulty in breathing. Itching and hives may also occur due to the release of histamines. Identifying these symptoms promptly is essential for effective emergency response, as anaphylaxis can be life-threatening. The presence of both respiratory distress and a drop in blood pressure makes option A clearly representative of the critical signs of this severe reaction. In contrast, the other options include symptoms that could be associated with different medical emergencies, such as cardiac or respiratory issues, rather than the specific indicators of a severe allergic reaction. Understanding the context of these signs helps in discriminating between various health emergencies and providing the appropriate care.

9. When spinal injuries are suspected, the EMS provider should FIRST:

A. Hyperextend the neck to secure the airway

B. Determine the extent of the paralysis

C. Apply an extrication collar

D. Apply manual stabilization and secure the airway

When spinal injuries are suspected, prioritizing patient stabilization is essential before any further interventions. Applying manual stabilization of the head and neck is critical as it minimizes any potential movement that could exacerbate a spinal injury. This action helps to protect the spinal cord while ensuring that the airway is secured. After this step, other interventions, such as applying an extrication collar, can follow. However, manual stabilization must occur first to keep the spine in a neutral position and limit any movement that could lead to further injury. Ensuring that the airway is secure is also paramount, especially in trauma cases, as compromised airway management can have dire consequences. The emphasis on stability and maintaining a secure airway underscores the principle of providing safe and effective patient care in emergency situations.

10. For a trauma victim with a respiratory rate of 40/min, shallow and irregular, who is pale and has a history of emphysema, the MOST APPROPRIATE treatment would be to:

A. Use a BVM with supplemental oxygen

B. Administer low-concentration oxygen because of emphysema history

C. Administer supplemental oxygen with a high-concentration mask

D. Transport the patient sitting up to ease the patient's dyspnea

In this scenario, the trauma victim displays a very high respiratory rate of 40 breaths per minute, which is considered tachypnea. The breathing is shallow and irregular, indicating possible respiratory distress or failure. The patient's history of emphysema complicates the situation since individuals with this condition may have altered respiratory drive and can be sensitive to high concentrations of oxygen. Using a bag-valve-mask (BVM) with supplemental oxygen is the most appropriate treatment because it allows for controlled ventilation. The BVM can provide positive pressure ventilation, which helps to maintain sufficient tidal volume and improve oxygenation, particularly in a patient who is breathing inadequately or is in respiratory distress. In cases of shallow or irregular breathing, conventional oxygen delivery methods may not adequately meet the patient's needs. While administering low-concentration oxygen might seem reasonable given the emphysema history, it may not provide enough support for this patient's current respiratory status, especially with the signs of possible hypoxia indicated by pallor. Offering high-concentration oxygen can further risk respiratory depression in emphysema patients who often rely on lower oxygen levels for their drive to breathe. Transporting the patient sitting up can help alleviate some discomfort from dyspnea but does not address the immediate need for adequate ventilation