New York City Certified First Responder – Defibrillation (CFR-D) Practice Exam (Sample)

Study Guide

Everything you need from our exam experts!

Questions

1. Where should hands be located for CPR on an adult?

A. Upper chest area

B. Lower half of the breastbone

C. Middle of the abdomen

D. Near the shoulder blades

2. Which symptom suggests a rapid onset of altered mental status?

A. Dry skin

B. Fluid retention

C. Cold and clammy skin

D. Elevated heart rate

3. During CPR, what is the compression depth for an infant?

A. 1 inch

B. 1.5 inches

C. 1/3 the depth of the chest

D. 2 inches

4. What should be done for a choking adult who can still cough or speak?

A. Encourage them to cough

B. Perform the Heimlich maneuver

C. Call for help immediately

D. Give them water

5. What type of injury is described as a scrape that causes minimal or no bleeding?

A. Laceration

B. Puncture

C. Abrasion

D. Contusion

6. In the case of a foreign body airway obstruction (FBAO) in an adult, what should be done if they can clear their own airway?

- **A. Intervene immediately**
- **B. Monitor the patient**
- **C. Provide back blows**
- **D. Administer abdominal thrusts**

7. What is the primary role of the alveoli in the respiratory system?

- **A. To trap foreign particles**
- **B. To facilitate oxygen and carbon dioxide exchange**
- **C. To supply nutrients to lung tissue**
- **D. To regulate lung volume during respiration**

8. What does the term "lateral" indicate?

- **A. Closer to the midline**
- **B. Further away from the midline**
- **C. Above the body**
- **D. Near the midline**

9. What is the correct response for a suspected heart attack?

- **A. Push on the person's chest**
- **B. Have them lie down and rest**
- **C. Encourage them to move around**
- **D. Give them food and drink**

10. What is the first priority during a patient assessment?

- **A. Patient comfort**
- **B. Scene safety**
- **C. Calling for help**
- **D. Assessing vital signs**

Answers

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

Explanations

1. Where should hands be located for CPR on an adult?

A. Upper chest area

B. Lower half of the breastbone

C. Middle of the abdomen

D. Near the shoulder blades

The correct placement of hands for performing CPR on an adult is on the lower half of the breastbone, also known as the sternum. This location is critical because it allows for effective compression of the heart. When hands are positioned here, the rescuers can apply adequate force directly onto the heart, which is located behind the sternum and acts as a pump to circulate blood throughout the body. Compressing lower on the breastbone helps ensure that the compressions are delivered at the correct depth and with the proper alignment to maximize blood flow to vital organs, especially the brain and heart. This placement also minimizes the risk of injury to other structures, as positioning the hands incorrectly can lead to ineffective compressions or potential harm. The focus on the lower half of the breastbone emphasizes a proper technique that is vital for successful resuscitation efforts. However, other locations, such as the upper chest area or the abdomen, are not ideal for effective CPR, as they do not provide the direct access necessary to compress the heart effectively.

2. Which symptom suggests a rapid onset of altered mental status?

A. Dry skin

B. Fluid retention

C. Cold and clammy skin

D. Elevated heart rate

The symptom indicating a rapid onset of altered mental status is cold and clammy skin. When someone experiences cold and clammy skin, it often suggests a state of shock or an acute cardiovascular issue, which can lead to inadequate blood flow to the brain. This reduced perfusion can result in confusion, disorientation, or other changes in mental status. Cold and clammy skin can occur in various conditions, including hypoglycemia, shock, or severe anxiety, where the body is responding to a crisis by activating the sympathetic nervous system. This physiological response can impair cognitive function rapidly, making it critical for first responders to recognize this symptom as a sign of altered mental status. The other symptoms—such as dry skin, fluid retention, and elevated heart rate—do not directly imply an immediate alteration in mental status in the same way. For instance, dry skin can be more indicative of dehydration rather than an acute episode, fluid retention might suggest heart failure or kidney issues, and while an elevated heart rate can be related to various conditions, it does not necessarily indicate an immediate change in cognitive function. Therefore, cold and clammy skin stands out as the most telling sign of a rapid alteration in mental status.

3. During CPR, what is the compression depth for an infant?

A. 1 inch

B. 1.5 inches

C. 1/3 the depth of the chest

D. 2 inches

The compression depth for an infant during CPR is indeed recommended to be at least one-third the depth of the chest. This guideline is critical because it ensures that adequate blood flow is generated to vital organs during resuscitation efforts. For infants, this depth is typically around 1.5 inches, but using the one-third depth guideline allows for variations in the size and age of the infant, ensuring that compressions are effective regardless of their specific measurements. This approach aligns with the emphasis on maximizing the chances of return of spontaneous circulation. Additionally, it reinforces the importance of proper hand placement and technique during compressions to ensure that the rescuer can effectively support life in critical situations.

4. What should be done for a choking adult who can still cough or speak?

A. Encourage them to cough

B. Perform the Heimlich maneuver

C. Call for help immediately

D. Give them water

Encouraging a person who is choking but can still cough or speak is the appropriate response because it allows them to use their own reflexes to expel the object causing the obstruction. Coughing is a natural mechanism that can help dislodge food or other materials from the airway. When a person can cough or speak, they are still able to breathe, even if it is difficult, and it is crucial to let them continue trying to clear their airway as long as they are able to do so. Performing the Heimlich maneuver is not necessary in this situation because it is intended for individuals who cannot cough, speak, or breathe effectively. Calling for help may be advisable in some situations, but if the person can still cough or speak, immediate emergency assistance might not be required. Giving them water is not recommended, as it could potentially worsen the obstruction or cause choking to escalate further. Therefore, encouraging coughing is the best course of action in this scenario to facilitate clearing the airway naturally.

5. What type of injury is described as a scrape that causes minimal or no bleeding?

A. Laceration

B. Puncture

C. Abrasion

D. Contusion

An abrasion is characterized as a scrape on the skin that typically results in minimal or no bleeding. This type of injury occurs when the skin is rubbed or scraped against a hard surface, leading to the removal of the outer layer of the skin, known as the epidermis. Because the injury usually does not penetrate deeply, it is less likely to damage underlying blood vessels, thereby causing limited bleeding. In contrast, a laceration involves a cut or tear in the skin, which often results in significant bleeding depending on the depth and location of the injury. A puncture wound is created from a sharp object piercing through the skin, leading to a deeper injury, while a contusion, or bruise, occurs from blunt force trauma that damages blood vessels beneath the skin without breaking the surface. These other types of injuries differ fundamentally from abrasions in both their mechanisms and their bleeding characteristics.

6. In the case of a foreign body airway obstruction (FBAO) in an adult, what should be done if they can clear their own airway?

A. Intervene immediately

B. Monitor the patient

C. Provide back blows

D. Administer abdominal thrusts

When a person is experiencing a foreign body airway obstruction but is able to clear their own airway, the most appropriate action is to monitor the patient. This is because the individual is demonstrating the ability to breathe and expel the obstruction, indicating that their respiratory status is stable at that moment. Continuous monitoring allows the responder to ensure that the person does not experience a decline in their condition. If the situation changes and the individual becomes unable to clear their airway, then more intensive interventions would be needed. Immediate intervention, such as administering abdominal thrusts or back blows, is only warranted if the individual shows signs of severe airway obstruction where they cannot speak, cough, or breathe effectively. Thus, vigilant monitoring provides a balance of support without interfering with the patient's capacity to handle the situation on their own.

7. What is the primary role of the alveoli in the respiratory system?

A. To trap foreign particles

B. To facilitate oxygen and carbon dioxide exchange

C. To supply nutrients to lung tissue

D. To regulate lung volume during respiration

The primary role of the alveoli in the respiratory system is to facilitate the exchange of oxygen and carbon dioxide. Alveoli are tiny air sacs located at the ends of the bronchioles in the lungs, where the exchange of gases occurs. When air is inhaled into the lungs, it reaches the alveoli, where oxygen from the air passes through their thin walls into the surrounding capillaries, entering the bloodstream. At the same time, carbon dioxide from the blood moves into the alveoli to be exhaled. This efficient gas exchange is critical for maintaining the body's oxygen levels and removing carbon dioxide, a waste product of metabolism. This function is vital for cellular respiration, the process by which cells generate energy. Without the proper functioning of alveoli, the body's ability to obtain oxygen and expel carbon dioxide would be severely compromised, leading to respiratory failure and other serious health issues.

8. What does the term "lateral" indicate?

A. Closer to the midline

B. Further away from the midline

C. Above the body

D. Near the midline

The term "lateral" refers to a position that is further away from the midline of the body. In anatomical terminology, the midline is an imaginary line that divides the body into equal left and right halves. Therefore, when something is described as lateral, it indicates a location that is to the side of this midline, moving away from the center of the body. Understanding these directional terms is crucial in medical and anatomical contexts, as they help healthcare providers communicate effectively about the locations of structures and potential issues within the body.

9. What is the correct response for a suspected heart attack?

A. Push on the person's chest

B. Have them lie down and rest

C. Encourage them to move around

D. Give them food and drink

Having the person lie down and rest is the appropriate response for a suspected heart attack because it minimizes physical exertion, which can exacerbate the condition and lead to increased strain on the heart. By resting, the individual can avoid additional stress on the cardiovascular system, allowing them to remain as calm and stable as possible while awaiting emergency medical services. This position can also help ease discomfort and improve blood flow. Providing rest can help manage symptoms until professional help arrives, as movement or exertion could lead to severe complications. It's critical that the individual remains calm and comfortable in a safe environment.

10. What is the first priority during a patient assessment?

A. Patient comfort

B. Scene safety

C. Calling for help

D. Assessing vital signs

The first priority during a patient assessment is to ensure scene safety. This step is crucial because if the scene is not safe, both the responder and the patient could be at risk of further harm. Before any medical assessment or intervention can begin, responders must evaluate the environment to identify potential hazards, such as traffic, fire, or unstable surroundings. Ensuring a safe scene allows for the assessment and treatment of the patient without putting additional lives in jeopardy. Focusing on patient comfort, calling for help, or assessing vital signs are important aspects of patient care, but they cannot be addressed effectively if the responder's safety or the safety of others is compromised. A hazardous scene could lead to further injuries or complications, hindering the ability to provide necessary care. Hence, prioritizing scene safety lays the foundation for effective patient assessment and care.