SNHD Advanced EMT (AEMT) Protocols Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

Questions

1. What are some potential complications of high-flow oxygen therapy?

A. Hypoxia and bradycardia

B. Oxygen toxicity and hypercapnia

C. Vasodilation and hypotension

D. Pneumothorax and pulmonary edema

2. How much normal saline should a patient complaining of abdominal pain and showing signs of hypovolemia receive?

A. 250 mL bolus, repeated up to 1000 mL

B. 500 mL bolus, repeated up to 2000 mL

C. 750 mL bolus, repeated up to 3000 mL

D. 1000 mL bolus, repeated up to 4000 mL

3. What is the dose of Benadryl for a pediatric patient experiencing a dystonic reaction?

A. 0.5 mg/kg

B. 1.0 mg/kg

C. 1.5 mg/kg

D. 2.0 mg/kg

4. What should an AEMT monitor for when administering IV fluids?

A. Signs of dehydration

B. Signs of fluid overload or an adverse reaction

C. Patient's mood changes

D. Respiratory rate changes

5. For CPR on an adult, what is the correct compression to ventilation ratio for an AEMT?

A. 30:2

B. 15:2

C. 30:1

D. 5:1

6. In the event of a suspected stroke, what acronym is used to assess the patient's condition?

A. FAST

B. CPR

C. BLS

D. PALS

7. A pediatric patient requiring evaluation in a burn center shall be transported to:

A. Children's Hospital Los Angeles

B. UMC Pediatric ED

C. Sunnydale Pediatric Clinic

D. Springfield General Hospital

8. What is the pediatric dosage for Narcan?

A. 0.05 mg/kg

B. 0.1 mg/kg

C. 0.2 mg/kg

D. 0.5 mg/kg

9. Which medication is specifically used by AEMTs to treat asthma attacks?

A. Albuterol

B. Aspirin

C. Nitroglycerin

D. Atropine

10. Narcan is classified as what type of drug?

A. Narcotic

B. Narcotic antagonist

C. Non-narcotic analgesic

D. Vasodilator

Answers

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

Explanations

1. What are some potential complications of high-flow oxygen therapy?

A. Hypoxia and bradycardia

B. Oxygen toxicity and hypercapnia

C. Vasodilation and hypotension

D. Pneumothorax and pulmonary edema

High-flow oxygen therapy, while beneficial in many clinical scenarios, can lead to specific complications if not administered appropriately. Oxygen toxicity is a significant concern, particularly when patients are exposed to high concentrations of oxygen for extended periods. Prolonged exposure to elevated oxygen levels can result in damage to the lungs and central nervous system, causing symptoms such as chest pain, difficulty breathing, or even seizures. Additionally, hypercapnia, or an increase in carbon dioxide levels in the blood, can occur in patients with chronic obstructive pulmonary disease (COPD) who may be particularly sensitive to changes in their oxygen levels. Administering high-flow oxygen can suppress their respiratory drive, leading to insufficient expulsion of carbon dioxide, thereby exacerbating their condition. In contrast, while the other options may involve potential health concerns, they are not directly linked to the use of high-flow oxygen therapy in the same manner. Understanding these complications emphasizes the importance of carefully monitoring patients receiving high-flow oxygen to avoid these adverse effects.

2. How much normal saline should a patient complaining of abdominal pain and showing signs of hypovolemia receive?

A. 250 mL bolus, repeated up to 1000 mL

B. 500 mL bolus, repeated up to 2000 mL

C. 750 mL bolus, repeated up to 3000 mL

D. 1000 mL bolus, repeated up to 4000 mL

In the context of treating a patient presenting with abdominal pain and signs of hypovolemia, administering 500 mL boluses of normal saline, with the option to repeat up to a total of 2000 mL, is appropriate for several reasons. Hypovolemia can result from various causes, including fluid loss from gastrointestinal issues, bleeding, or other medical conditions, making it critical to restore circulatory volume effectively and safely. The choice of a 500 mL bolus is a balanced approach that allows for rapid fluid resuscitation without overwhelming the patient's cardiovascular system. This volume facilitates close monitoring for potential responses or complications, such as fluid overload or changes in vital signs, particularly in patients who may be sensitive to larger volumes. Moreover, the ability to repeat up to a total of 2000 mL provides flexibility, allowing the healthcare provider to tailor the resuscitation to the patient's ongoing response, ensuring that fluid administration is guided by clinical assessment. This method promotes a cautious yet effective strategy in managing hypovolemia while keeping an eye on the patient's comfort and physiological stability. Other volumetric options presented may be excessive or too aggressive, which can pose risks and would necessitate careful monitoring beyond standard protocols, particularly in the

3. What is the dose of Benadryl for a pediatric patient experiencing a dystonic reaction?

A. 0.5 mg/kg

B. 1.0 mg/kg

C. 1.5 mg/kg

D. 2.0 mg/kg

The appropriate dose of Benadryl (diphenhydramine) for a pediatric patient experiencing a dystonic reaction is 1.0 mg/kg. This dosage is effective for managing symptoms associated with dystonic reactions, which can include muscle spasms or abnormal postures due to certain medications, especially antipsychotics. In the context of treatment, Benadryl acts as an antihistamine with anticholinergic properties, helping to alleviate these symptoms. The dosing is typically calculated based on the child's weight to ensure safety and efficacy. Administering 1.0 mg/kg allows for adequate coverage while minimizing the risk of side effects that could occur with higher doses. This standard dosing reflects clinical guidelines and is well supported by practices in emergency medicine for treating such reactions in pediatric patients. It's important to adhere to this established dosing to achieve optimal outcomes while ensuring the safety of the child.

4. What should an AEMT monitor for when administering IV fluids?

A. Signs of dehydration

B. Signs of fluid overload or an adverse reaction

C. Patient's mood changes

D. Respiratory rate changes

When administering IV fluids, an AEMT must monitor for signs of fluid overload or any adverse reactions. This is crucial because the introduction of fluids into the circulatory system can lead to complications, particularly if the volume is excessive or if the patient has certain underlying conditions such as heart failure or kidney disease. Signs of fluid overload may include increased blood pressure, swelling in extremities, difficulty breathing, or pulmonary edema. Monitoring for adverse reactions is equally important, as patients may have allergic reactions or other responses to the fluids, including electrolyte imbalances or infections at the injection site. While monitoring for signs of dehydration, changes in a patient's mood, or respiratory rate can be important in a broader assessment of the patient's health and status, they are not the most critical factors to consider immediately when administering IV fluids. Focusing on fluid overload and adverse reactions directly addresses the risks associated with IV therapy and ensures patient safety.

5. For CPR on an adult, what is the correct compression to ventilation ratio for an AEMT?

A. 30:2

B. 15:2

C. 30:1

D. 5:1

The correct compression to ventilation ratio for an Advanced EMT (AEMT) performing CPR on an adult is 30:2. This ratio is used in scenarios where a single rescuer is providing CPR. It indicates that for every 30 chest compressions delivered, the rescuer should provide 2 rescue breaths. This ratio is important because it ensures that adequate circulatory support is maintained through continuous compressions while also providing necessary oxygenation with the rescue breaths. The emphasis on a higher compression count before breaths helps to keep blood circulating effectively, which is critical in maintaining perfusion to vital organs during a cardiac arrest. In the context of the options that are not correct, the 15:2 ratio is typically used for child CPR, where a higher frequency of ventilation is needed relative to compressions due to anatomical differences and metabolic needs of smaller patients. The 30:1 and 5:1 ratios do not align with established guidelines for adult CPR, as they either focus too heavily on compressions or diminish the required rescue breaths per cycle significantly, which could compromise the effectiveness of resuscitation efforts.

6. In the event of a suspected stroke, what acronym is used to assess the patient's condition?

A. FAST

B. CPR

C. BLS

D. PALS

The acronym used to assess a patient's condition in the event of a suspected stroke is FAST. This stands for Face drooping, Arm weakness, Speech difficulties, and Time to call emergency services. Each component of this acronym helps identify common signs and symptoms of a stroke. For instance, checking for facial drooping involves asking the patient to smile, as one side may droop if they are having a stroke. Evaluating arm weakness means asking the patient to raise both arms to see if one drifts down. Looking for speech difficulties involves having the patient repeat a simple phrase to assess slurred or unusual speech patterns. Recognizing these signs quickly is crucial because timely medical intervention can significantly impact outcomes in stroke patients. Other acronyms, such as CPR (Cardiopulmonary Resuscitation), BLS (Basic Life Support), and PALS (Pediatric Advanced Life Support), are related to different emergency situations and guidelines, but they do not specifically address the assessment of stroke symptoms. Thus, FAST is the most appropriate choice in this context.

7. A pediatric patient requiring evaluation in a burn center shall be transported to:

A. Children's Hospital Los Angeles

B. UMC Pediatric ED

C. Sunnydale Pediatric Clinic

D. Springfield General Hospital

In this scenario, the correct choice is to transport the pediatric patient requiring evaluation in a burn center to UMC Pediatric ED because it is specifically designed to provide specialized care for children, including those with burn injuries. Pediatric emergency departments have staff, equipment, and protocols suited for the unique needs of children, which are significantly different from adult care. Children have different physiological responses and treatment needs in the event of a burn, and a dedicated pediatric ED would have the appropriate resources and expertise to manage such cases effectively. The other options, while they might provide various medical services, do not specifically indicate a designated pediatric emergency care setting or a burn center, which are crucial for optimal care in a burn situation. Transporting to a location like a general hospital or a clinic may not ensure the specialized care that a burn injury in a pediatric patient demands. Thus, UMC Pediatric ED is the appropriate and best choice for transporting this patient.

8. What is the pediatric dosage for Narcan?

A. 0.05 mg/kg

B. 0.1 mg/kg

C. 0.2 mg/kg

D. 0.5 mg/kg

The pediatric dosage for Narcan (naloxone) is typically recognized as 0.1 mg/kg. This dosing is established to effectively reverse opioid overdoses in children, taking into account their smaller body mass and the differences in metabolism compared to adults. When using medications in pediatrics, it's crucial to adjust dosages according to weight to ensure safety and efficacy. Using 0.1 mg/kg allows for adequate reversal of opioid effects while minimizing potential side effects or complications from overdose, making it the recommended dosage in emergency situations for pediatric patients.

9. Which medication is specifically used by AEMTs to treat asthma attacks?

A. Albuterol

B. Aspirin

C. Nitroglycerin

D. Atropine

Albuterol is specifically used by AEMTs to treat asthma attacks due to its classification as a short-acting beta-2 adrenergic agonist. This medication functions by relaxing the muscles in the airways, leading to bronchial dilation and improved airflow, which is critical during an asthma attack where airway constriction is prominent. Albuterol acts quickly, typically within minutes, providing rapid relief from acute symptoms such as wheezing, shortness of breath, and chest tightness associated with asthma. The other medications listed do not serve this purpose. Aspirin is primarily used to reduce pain and inflammation, and to inhibit platelet aggregation in certain cardiac events, but it does not address the bronchodilation needed in asthma. Nitroglycerin is a vasodilator used for chest pain or heart-related issues, and it also does not relieve asthma symptoms. Atropine, while it can be used in some respiratory conditions, primarily serves to increase heart rate and does not act specifically to alleviate bronchospasm like albuterol does. Thus, albuterol is the appropriate choice for treating asthma attacks among the options provided.

10. Narcan is classified as what type of drug?

A. Narcotic

B. Narcotic antagonist

C. Non-narcotic analgesic

D. Vasodilator

Narcan, also known as naloxone, is classified as a narcotic antagonist. This classification is significant because it highlights Narcan's primary function in the medical field: it blocks the effects of opioids. When administered, Narcan competes with narcotics for binding sites in the central nervous system, effectively reversing the effects of opioid overdose, including respiratory depression and sedation. This ability to counteract the life-threatening effects of narcotics makes it crucial in emergency situations involving opioid overdoses. Unlike narcotics, which are substances that cause sedation or pain relief, Narcan actively works to negate those effects. Therefore, its role as a narcotic antagonist is vital for the safety and recovery of individuals experiencing an opioid overdose. Understanding this classification helps healthcare providers make informed decisions when responding to overdose situations.