NCLEX Registered Nurse (NCLEX-RN) Practice Exam Sample Study Guide

EVERYTHING you need from our exam experts!

Featuring practice questions, answers, and explanations for each question.

Questions

1. What does the acronym "DRUNK" relate to in terms of signs and symptoms of hypoglycemia?

A. Decreased reflexes and unreal behavior

B. Dehydration and rapid breathing

C. Irritability and tachypnea

D. Dry mucous membranes and high temperature

2. What is aminophylline primarily used to treat?

A. Seizures

B. Asthma

C. Heart failure

D. Anemia

3. What are the 3 C's that characterize school-age children (ages 7-11)?

A. Creative, Caring, Cooperative

B. Creative, Competitive, Collective

C. Curious, Communicative, Competitive

D. Cooperative, Crafty, Conscientious

4. What does QRS represent in an ECG reading?

A. Atrial depolarization

B. Ventricular depolarization

C. Ventricular repolarization

D. Atrial repolarization

5. What are the common signs and symptoms of hypokalemia?

A. Lethargy, ileus, increased heart rate, high urine output

B. Muscle cramps, low heart rate, decreased urine output, fatigue

C. Nausea, vomiting, increased heart rate, dehydration

D. Seizures, bradycardia, high urine output, anxiety

6. What should be monitored when administering Cardizem?

- **A. Heart rate**
- **B. Respiratory rate**
- **C. Blood pressure**
- **D. Temperature**

7. What is often a sign of successful chest tube placement in a pneumothorax?

- **A. Decreased respiratory rate**
- **B. Subcutaneous emphysema**
- **C. Improved oxygen saturation levels**
- **D. Increased heart rate**

8. What is the antidote for treating severe acetaminophen overdose?

- **A. Calcium disodium edetate**
- **B. N-acetylcysteine**
- **C. Physostigmine**
- **D. Atropine**

9. Why is thyroid storm considered a medical emergency?

- **A. It can lead to severe dehydration**
- **B. It can cause brain damage**
- **C. It is always fatal**
- **D. It is highly contagious**

10. Calcium channel blockers are most similar to which type of medication for the heart?

- **A. Diuretics**
- **B. Beta blockers**
- **C. Valium**
- **D. Anticoagulants**

Answers

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

Explanations

1. What does the acronym "DRUNK" relate to in terms of signs and symptoms of hypoglycemia?

A. Decreased reflexes and unreal behavior

B. Dehydration and rapid breathing

C. Irritability and tachypnea

D. Dry mucous membranes and high temperature

The acronym "DRUNK," when relating to signs and symptoms of hypoglycemia, typically signifies a range of psychological and physiological changes that occur when blood glucose levels drop significantly. The correct answer involves irritability and tachypnea, as these symptoms reflect the body's reaction to the lack of glucose, which is the primary energy source for the brain and other vital organs. Irritability can manifest as mood swings or agitation due to the brain's insufficient glucose supply, leading to impaired communication and emotional responses. Tachypnea, or rapid breathing, can occur as the body responds to stress and attempts to compensate for the metabolic imbalances associated with low blood sugar levels. The other options include symptoms that are not primarily associated with hypoglycemia. For instance, decreased reflexes and unrealistic behavior relate more closely to severe neurological impairment rather than hypoglycemic states. Dehydration and rapid breathing can occur in different contexts, such as in metabolic acidosis or respiratory distress, but are not direct indicators of low blood glucose. Similarly, dry mucous membranes and high temperature are more indicative of dehydration or infection than of hypoglycemia. Understanding these signs is crucial in nursing practice to recognize and respond to individuals experiencing low blood sugar effectively.

2. What is aminophylline primarily used to treat?

A. Seizures

B. Asthma

C. Heart failure

D. Anemia

Aminophylline is primarily used as a bronchodilator to treat asthma and other conditions involving airway obstruction. It works by relaxing the muscles in the airways, allowing for easier breathing and improved airflow to the lungs. This makes it particularly useful in managing asthma attacks or exacerbations, where the airways become constricted due to inflammation or bronchospasm. In the context of asthma, aminophylline can provide relief from symptoms by enhancing respiratory function, which is critical for patients experiencing acute asthma symptoms. Though it has other uses, such as in chronic obstructive pulmonary disease (COPD) and certain cases of apnea in premature infants, its most recognized application is in the treatment of asthma. The other conditions listed, such as seizures, heart failure, and anemia, do not benefit from aminophylline's pharmacological action, which is specific to respiratory issues. This specificity reinforces its designation as a treatment option mainly for asthma and similar respiratory challenges.

3. What are the 3 C's that characterize school-age children (ages 7-11)?

A. Creative, Caring, Cooperative

B. Creative, Competitive, Collective

C. Curious, Communicative, Competitive

D. Cooperative, Crafty, Conscientious

The characteristics that define school-age children, particularly between the ages of 7 to 11, include being Creative, Competitive, and Collective. During this developmental stage, children begin to explore their individuality more, which fosters creativity as they engage in various activities like arts and crafts, imaginative play, and problem-solving tasks. The competitive nature seen in this age group is prominent in both academic and social settings, as children often compare their skills and achievements with their peers. They begin to understand concepts of winning and losing, which enhances their motivation and teamwork abilities. The collective aspect reflects their growing ability to work within groups, collaborate with others, and understand group dynamics, essential skills for their social development. In contrast, while traits like Caring and Cooperative are important for children, they don't capture the essence of the school-age developmental phase as accurately as the chosen characteristics. Other options, such as Curious and Communicative, while relevant, do not align as closely with the distinctive attributes associated with this specific age group in terms of their interactions and engagement with peers.

4. What does QRS represent in an ECG reading?

A. Atrial depolarization

B. Ventricular depolarization

C. Ventricular repolarization

D. Atrial repolarization

The QRS complex in an electrocardiogram (ECG) reading represents ventricular depolarization, which is the process in which the ventricles of the heart contract in response to an electrical stimulus. This depolarization initiates the pumping action of the ventricles, propelling blood either to the lungs via the right ventricle or to the rest of the body through the left ventricle. During this phase of the cardiac cycle, the electrical signals move through the bundle of His, the bundle branches, and into the Purkinje fibers, leading to a synchronized contraction of the ventricular muscle. The shape and duration of the QRS complex can provide critical information about the heart's electrical activity and can indicate various cardiac conditions if abnormal. In contrast, atrial depolarization is represented by the P wave, and repolarization of the ventricles, which occurs after contraction, is depicted by the T wave. Atrial repolarization is not typically visible on an ECG as it occurs concurrently with the ventricular depolarization represented in the QRS complex. Understanding this is crucial for accurately interpreting ECG readings during clinical practice.

5. What are the common signs and symptoms of hypokalemia?

A. Lethargy, ileus, increased heart rate, high urine output

B. Muscle cramps, low heart rate, decreased urine output, fatigue

C. Nausea, vomiting, increased heart rate, dehydration

D. Seizures, bradycardia, high urine output, anxiety

The common signs and symptoms of hypokalemia, or low potassium levels in the blood, often include lethargy, ileus, increased heart rate, and high urine output. Lethargy can occur because potassium is essential for muscle and nerve function; deficiencies can lead to reduced energy levels and overall fatigue. An ileus, which is a lack of movement in the intestines, can result from decreased potassium because it affects smooth muscle contraction. An increased heart rate can happen due to the heart's dependence on potassium to maintain a normal rhythm; dips in potassium can lead to compensatory mechanisms, resulting in tachycardia. Additionally, high urine output is seen because hypokalemia can lead to an increase in aldosterone secretion, which promotes renal excretion of potassium and water, resulting in polyuria. Understanding these physiological responses helps clarify why these particular symptoms are associated with hypokalemia and informs the nursing assessment and management of patients experiencing this electrolyte imbalance.

6. What should be monitored when administering Cardizem?

A. Heart rate

B. Respiratory rate

C. Blood pressure

D. Temperature

When administering Cardizem (diltiazem), monitoring blood pressure is essential because the medication functions as a calcium channel blocker that helps to relax and widen blood vessels. This action can lead to decreased heart contractility and lower blood pressure as a direct result of its intended therapeutic effects. Monitoring blood pressure helps ensure that the patient's readings remain within a safe range, preventing issues such as hypotension, which can lead to dizziness, falls, or decreased organ perfusion. It's important to check blood pressure before starting the medication and during treatment, especially after a dosage change, to assess the patient's response and adjust treatment accordingly. While heart rate, respiratory rate, and temperature are also important vital signs in patient assessment, they are not the primary focus when it comes to the specific monitoring required for Cardizem administration. Heart rate monitoring is relevant, but the most critical parameter related to Cardizem's primary action and potential side effects remains blood pressure.

7. What is often a sign of successful chest tube placement in a pneumothorax?

A. Decreased respiratory rate

B. Subcutaneous emphysema

C. Improved oxygen saturation levels

D. Increased heart rate

Successful chest tube placement in a patient with a pneumothorax is indicated by improved oxygen saturation levels. The primary goal of placing a chest tube in this situation is to evacuate air from the pleural space, which allows for lung re-expansion and improved gas exchange. As the lung re-expands, oxygenation improves, leading to higher oxygen saturation levels, usually measured by pulse oximetry. Increased oxygen saturation reflects that the lungs are able to take in air more effectively and deliver oxygen to the bloodstream. This improvement is crucial for the patient's respiratory status and overall well-being. Monitoring oxygen saturation is a key indicator of the effectiveness of the intervention, as it directly correlates with the patient's ability to oxygenate. While decreased respiratory rate can occur as a response to improved condition, it is not the primary indicator of successful therapy. Subcutaneous emphysema, which is air trapped under the skin, is not a sign of successful tube placement and can indicate other complications. Increased heart rate may occur due to various stressors but does not specifically indicate successful resolution of a pneumothorax situation. Hence, improved oxygen saturation levels serve as the most reliable indicator of successful chest tube placement in this scenario.

8. What is the antidote for treating severe acetaminophen overdose?

A. Calcium disodium edetate

B. N-acetylcysteine

C. Physostigmine

D. Atropine

N-acetylcysteine is recognized as the antidote for severe acetaminophen overdose. This medication works primarily by replenishing glutathione levels in the liver, which are depleted during an acetaminophen overdose. Acetaminophen is metabolized in the liver, and when taken in excessive amounts, it can lead to the accumulation of toxic metabolites. N-acetylcysteine acts to neutralize these metabolites and protect liver cells from damage, significantly reducing the potential for acute liver failure. In addition to its role as an antidote, N-acetylcysteine also helps restore the balance of detoxifying compounds in the liver, which is crucial for preventing further hepatotoxicity. Administering this antidote within a specific time frame following the overdose is essential for maximizing its effectiveness; ideally, treatment should begin within 8 to 10 hours of ingestion. The other options provided do not function as antidotes for acetaminophen toxicity and are utilized in entirely different medical contexts. Understanding these distinct roles is crucial for safe and effective patient care.

9. Why is thyroid storm considered a medical emergency?

A. It can lead to severe dehydration

B. It can cause brain damage

C. It is always fatal

D. It is highly contagious

Thyroid storm is considered a medical emergency primarily due to the potential for significant and rapid physiological changes that can severely affect the body. In this condition, there is an exaggerated response to excess thyroid hormones, leading to symptoms such as hyperthermia, tachycardia, altered mental status, and even heart failure. The accelerated metabolism can result in substantial stress on vital organs, particularly the brain and heart. Brain damage can occur if there is a lack of brain perfusion and oxygen due to severe hypertension or arrhythmias associated with the storm. Additionally, the extreme hyperthermia (high fever) can also contribute to neurological compromise. Therefore, timely intervention is crucial to manage the symptoms and prevent life-threatening complications, including brain damage. While the other options may present certain risks in various contexts, they do not encapsulate the primary concern associated with thyroid storm. Severe dehydration might occur if the patient's state leads to excessive sweating or a hypermetabolic state, but this is not the main threat. Although thyroid storm can be fatal if left untreated, it is not guaranteed to always lead to death. Lastly, thyroid storm is not contagious; it is associated with underlying thyroid dysfunction rather than an infectious process.

10. Calcium channel blockers are most similar to which type of medication for the heart?

A. Diuretics

B. Beta blockers

C. Valium

D. Anticoagulants

Calcium channel blockers primarily function by inhibiting the influx of calcium ions into cardiac and smooth muscle cells, leading to decreased contractility, heart rate, and vascular resistance. The immediate implications of this mechanism are twofold: relaxation of blood vessels and a reduction in the workload of the heart. This makes calcium channel blockers useful in treating conditions such as hypertension and angina. The medication that is most similar to calcium channel blockers in terms of heart effects is actually beta blockers. Like calcium channel blockers, beta blockers reduce heart rate and blood pressure but do so through a different mechanism by blocking the action of epinephrine on beta receptors in the heart. This reduces the heart's demand for oxygen and lowers cardiac output. Diuretics, while they can affect blood pressure, primarily work on the kidneys to reduce fluid volume, which is a different action from that of calcium channel blockers. Anticoagulants prevent blood clot formation without directly affecting the heart's rate or contractility. Valium, primarily a benzodiazepine for anxiety and muscle relaxation, does not have any direct effect on heart rate, blood pressure, or cardiac muscle contraction. Therefore, beta blockers share the most similar therapeutic effects with calcium channel blockers related to heart function, making them the correct