CNJNE IVE Adult IV therapy Practice Test (Sample)

Study Guide

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Questions

1. How do you know if an IV site is patent?

A. Blood is visible in the IV line

B. There should be no swelling, redness, or pain, and fluid administers without resistance

C. The patient feels pain during administration

D. The flow rate is decreased

2. Which of the following are common insertion sites for Central Venous Catheters?

A. Forearm, hand, and scalp veins

B. Under the clavicle, the antecubital fossa, and the neck

C. Upper thigh, lower leg, and wrist veins

D. Inguinal area, dorsalis pedis artery, and radial artery

3. What is the purpose of a saline flush in IV therapy?

A. To enhance the medication's effectiveness

B. To maintain patency of the IV line and prevent clotting

C. To change the infusion solution

D. To reduce the risk of infection

4. What should be your first action if an IV is sluggish and not running as ordered?

A. Change the IV fluid to a different type

B. Identify possible causes for the sluggishness

C. Increase the IV flow rate manually

D. Notify the physician immediately

5. Which vein selection approach should be prioritized for IV insertion?

A. Use the largest vein available

B. Choose a distal site first for site conservation

C. Select any vein that is visible

D. Choose the most accessible vein regardless of condition

6. What should be prioritized in documentation following a transfusion reaction?

A. A summary of the entire nursing shift

B. Details of patient education provided

C. Immediate care provided and patient response

D. The history of previous transfusions

7. When using a pump for IV fluid infusion, what is important to note in the catheter documentation?

A. Whether it is a single or multiple lumen catheter

B. Whether a pump is being used or if it is by gravity infusion

C. The flow rate of the IV solution

D. The patient's reaction to IV therapy

8. What evidence-based practice helps prevent Catheter-Related Blood Stream Infection (CRBSI)?

A. Removal of central line when needed

B. Usage of sterilized needles only

C. Placement of catheter on the femoral site

D. Regular cleaning of the catheter site with alcohol

9. Which of the following statements is NOT true regarding IV infusion pumps?

A. A physician order is required to use an IV infusion pump

B. They provide accurate and controlled flow rates for IV fluids

C. IV infusion pumps can help prevent medication errors

D. They can deliver both large and small volumes of fluid

10. Which of the following statements about venous air embolism is true?

A. It can only occur during central line placement

B. Air may enter circulation by allowing the IV to run dry

C. Symptoms include fever and chills

D. It is generally harmless and resolves on its own

Answers

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

Explanations

1. How do you know if an IV site is patent?

A. Blood is visible in the IV line

B. There should be no swelling, redness, or pain, and fluid administers without resistance

C. The patient feels pain during administration

D. The flow rate is decreased

A patent IV site is one where the intravenous access is unobstructed, allowing fluids to flow freely without complications. In this case, assessing for swelling, redness, or pain is crucial. A patent IV should demonstrate none of these signs, indicating that the needle is properly positioned within the vein and not causing irritation or infiltration into surrounding tissue. Additionally, the ability to administer fluid without resistance confirms that the IV is functional. The presence of blood in the IV line does not necessarily indicate patency, as it could simply be a fluke upon initiating intravenous access or reflect other issues. Pain during administration or a decreased flow rate are clear indicators of a potential problem with the IV site. Pain usually signifies that the vein might be irritated or that there could be infiltration, while a decreased flow rate may indicate blockage or a poor site. Thus, the hallmark of a patent IV is the absence of negative symptoms and the successful flow of fluids.

2. Which of the following are common insertion sites for Central Venous Catheters?

A. Forearm, hand, and scalp veins

B. Under the clavicle, the antecubital fossa, and the neck

C. Upper thigh, lower leg, and wrist veins

D. Inguinal area, dorsalis pedis artery, and radial artery

The correct answer is indeed the sites under the clavicle, the antecubital fossa, and the neck, which are commonly used for the insertion of Central Venous Catheters (CVCs). These areas are preferred because they provide direct access to large central veins, which are essential for effective catheter placement. The subclavian vein, located under the clavicle, is a common site due to its large diameter and less risk of complications associated with other areas. The jugular veins in the neck also provide a direct route to the superior vena cava, making them suitable for CVC placement. In the antecubital fossa, the basilic and brachial veins can be accessed, which may be used for central access as well. Using these sites ensures that the catheter can accommodate high flow rates for delivering medications, fluids, or blood products, and allows for long-term access if needed. The anatomical positioning and the size of the vessels in these areas also reduce the risk of complications such as thrombosis, infection, or inadvertent injury to surrounding structures.

3. What is the purpose of a saline flush in IV therapy?

A. To enhance the medication's effectiveness

B. To maintain patency of the IV line and prevent clotting

C. To change the infusion solution

D. To reduce the risk of infection

The primary purpose of a saline flush in IV therapy is to maintain patency of the IV line and prevent clotting. This is crucial for ensuring that the line remains open, allowing for the continuous administration of fluids and medications as needed. Saline flushes help to clear any potential blockages that may form due to blood or medication precipitation within the IV catheter, thereby reducing the risk of occlusion and ensuring that the therapy can proceed without interruption. Additionally, by using saline to regularly flush the line, healthcare providers can help ensure that the blood does not clot within the catheter. Clots can lead to complications, including interruptions in therapy and the need to replace catheters, which can be uncomfortable for the patient and may increase the risk of infection. Keeping the IV line patent through saline flushes is a standard practice in IV therapy to facilitate effective treatment delivery.

4. What should be your first action if an IV is sluggish and not running as ordered?

A. Change the IV fluid to a different type

B. Identify possible causes for the sluggishness

C. Increase the IV flow rate manually

D. Notify the physician immediately

When faced with a sluggish IV that is not running as ordered, the initial priority should be to identify possible causes for the sluggishness. This approach allows the healthcare provider to assess the situation more thoroughly and understand what might be contributing to the issue. There are several reasons an IV might become sluggish, including kinks in the tubing, a partially clotted catheter, or issues related to the IV site such as infiltration or phlebitis. By determining the underlying cause, appropriate actions can be taken to resolve the issue effectively. Once the cause has been identified, the healthcare provider can then decide on the best intervention, whether it be adjusting the flow rate, changing the fluid, repositioning the IV site, or addressing any complications. This systematic approach is essential in ensuring patient safety and maintaining effective therapy.

5. Which vein selection approach should be prioritized for IV insertion?

A. Use the largest vein available

B. Choose a distal site first for site conservation

C. Select any vein that is visible

D. Choose the most accessible vein regardless of condition

Prioritizing the distal site for IV insertion is a fundamental practice in venous access. When healthcare professionals select a distal vein, it conserves proximal veins for potential future interventions, especially in patients who may require multiple IV insertions or have limited venous access options. This approach reduces the risk of damaging larger veins that are often critical for later use. Choosing a distal site first ensures that more accessible and larger veins remain available for later, minimizing complications such as phlebitis or infiltration in larger veins that might otherwise be used immediately. Given the varying circumstances and medical histories of patients, this approach supports optimal long-term care and improves the likelihood of successful venous access in subsequent procedures. While selecting the largest vein or one that appears visible may seem advantageous, these choices could lead to unnecessary complications if the distal site is overlooked. Accessibility should also be balanced with the condition of the vein, as prioritizing any vein without considering its state may lead to poor outcomes. Thus, focusing on distal sites first is the most strategic approach for IV insertion.

6. What should be prioritized in documentation following a transfusion reaction?

A. A summary of the entire nursing shift

B. Details of patient education provided

C. Immediate care provided and patient response

D. The history of previous transfusions

Prioritizing documentation of immediate care provided and the patient's response after a transfusion reaction is essential for several reasons. First and foremost, this information is critical for ensuring patient safety. Documenting the immediate care allows healthcare providers to understand the interventions implemented and the patient's reaction to those interventions, which can inform further treatment decisions. Additionally, accurate and thorough documentation of the patient's response enables other healthcare team members to be aware of the situation, ensuring continuity of care and a cohesive response to the potential complications of the transfusion reaction. This documentation serves as a legal record and may be referred to in future assessments or if further complications arise. While the other options contain valuable information, they do not focus on the immediate and critical nature of the patient's reaction and care during a transfusion reaction event, which is time-sensitive and directly impacts patient outcomes.

7. When using a pump for IV fluid infusion, what is important to note in the catheter documentation?

A. Whether it is a single or multiple lumen catheter

B. Whether a pump is being used or if it is by gravity infusion

C. The flow rate of the IV solution

D. The patient's reaction to IV therapy

When documenting the use of a pump for IV fluid infusion, it is crucial to note whether a pump is being used or if the infusion is being administered by gravity. This is important because the method of infusion significantly affects the delivery rate and total volume of fluids being infused. A pump controls the flow rate precisely, reducing the risk of over-infusion or under-infusion, which can have direct implications for patient safety and treatment efficacy. Accurate documentation of the infusion method supports consistency in patient care and allows for better assessment and adjustments to the therapy based on ongoing patient needs. In the context of the other options, while the type of catheter, flow rate, and the patient's reaction to IV therapy are all important aspects of overall IV management, they are not as directly linked to the infusion method documentation as the use of a pump or gravity. Thus, noting whether a pump is in use is critical for ensuring the delivery of fluids is properly managed and monitored.

8. What evidence-based practice helps prevent Catheter-Related Blood Stream Infection (CRBSI)?

A. Removal of central line when needed

B. Usage of sterilized needles only

C. Placement of catheter on the femoral site

D. Regular cleaning of the catheter site with alcohol

The best choice to prevent Catheter-Related Blood Stream Infection (CRBSI) is the removal of the central line when it is no longer necessary. This is based on evidence that the longer a catheter is in place, the higher the risk of infection. Therefore, timely removal of central lines can significantly reduce the chances of developing CRBSI, as it eliminates the potential entry point for pathogens. While other practices listed may play a role in infection control, they do not specifically address the inherent risk associated with the duration of catheter use. Using sterilized needles is important for preventing introduction of bacteria, but it doesn't directly relate to the continued presence of a catheter. Placement of a catheter at the femoral site can actually be associated with a higher risk of infection compared to other sites like the subclavian or internal jugular veins. Regular cleaning of the catheter site with alcohol is an essential practice for maintaining hygiene around the catheter, but it cannot override the risk introduced by leaving an unnecessary central line in place for an extended period. Hence, the proactive approach of removing the catheter when it is no longer needed stands out as the most effective evidence-based practice for preventing CRBSI.

9. Which of the following statements is NOT true regarding IV infusion pumps?

A. A physician order is required to use an IV infusion pump

B. They provide accurate and controlled flow rates for IV fluids

C. IV infusion pumps can help prevent medication errors

D. They can deliver both large and small volumes of fluid

An IV infusion pump is a medical device designed to deliver fluids, such as medications and nutrients, directly into a patient's circulatory system in a controlled manner. The statement indicating that a physician order is required to use an IV infusion pump is not true in the context provided. While protocols and hospital policies often necessitate a physician's order for the administration of specific medications or treatments, the operation of the pump itself can be carried out by trained nursing staff or clinicians following established guidelines. The other statements are accurate representations of the functions and benefits of IV infusion pumps. They are designed to provide precise control over the flow rates of IV fluids, ensuring that patients receive their medications and fluids at the correct dosages. This precision helps minimize the risk of administering incorrect doses, which is crucial in preventing medication errors. Additionally, IV infusion pumps are versatile; they can accommodate both large volume infusions (such as fluids for hydration or nutrition) and small volume infusions (like concentrated medications), making them suitable for a wide range of clinical scenarios.

10. Which of the following statements about venous air embolism is true?

A. It can only occur during central line placement

B. Air may enter circulation by allowing the IV to run dry

C. Symptoms include fever and chills

D. It is generally harmless and resolves on its own

The statement regarding venous air embolism that accurately reflects the condition is that air may enter circulation by allowing the IV to run dry. This situation occurs when the infusion line ends up empty or not adequately filled with fluid, leading to negative pressure that can draw air into the bloodstream. This is particularly concerning in intravenous therapy, as small amounts of air can lead to significant complications. When the intravenous line is not continuously supplied with fluid, the risk of air being introduced into the venous system increases, which can disrupt blood flow and potentially lead to serious health issues, including obstruction in blood vessels. In contrast to this, the other options present misconceptions about venous air embolism. It's important to recognize that air embolisms can occur in various situations, not just during central line placements, and their symptoms typically include respiratory distress and cardiovascular changes rather than fever and chills. Furthermore, a venous air embolism is not harmless; it can have serious consequences depending on the volume of air that enters the circulation and the specific context of the patient's health.