DaVita In-Center Hemodialysis (ICHD) Nurse/PCT Practice Test (Sample)

Study Guide

BY EXAMZIFY

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Questions

1. What should be done if a patient exhibits signs of hemodynamic instability during dialysis?

A. Continue dialysis without interruptions

B. Refer immediately to the patient's physician

C. Stop the session and monitor vitals

D. Increase the blood flow rate

2. Which condition is an example of an intra-renal cause of AKI?

A. Bladder obstruction

B. Ischemic acute tubular necrosis (ATN)

C. Cardiac failure

D. Renal artery stenosis

3. What is the primary focus of DQI success in patient care?

A. Managing individual Patient First and allowing scores to follow

B. Streamlining administrative processes

C. Reducing the number of patient complaints

D. Enhancing the physical environment of care

4. Which of the following is not a symptom of angina?

A. Dizziness

B. Nausea

C. Confusion

D. Chest pain

5. What is the suggested blood flow rate for a 15 G needle gauge?

A. 200-250 mL/min

B. 250-350 mL/min

C. 350-450 mL/min

D. 450 mL/min and above

6. Which of the following is NOT an indicator of optimal nutritional status?

A. Albumin levels of 3.5

B. Adequate fat stores

C. Stable target weight

D. Appropriate appetite intake

7. What physiological change occurs with a decrease in blood pH?

A. Increased coagulation

B. Increased respiratory rate and depth

C. Decreased blood flow

D. Increased blood pressure

8. What is a major disadvantage of a Central Venous Catheter?

A. Higher ease of insertion

B. Risk of significant infections

C. Long time to mature

D. Requires surgical intervention

9. What happens to blood pH when there is an increase noted in the respiratory center?

A. It remains unchanged

B. It decreases

C. It increases

D. It results in CO2 accumulation

10. When should the communication style "Guiding" be used in caregiving?

A. To facilitate behavioral change

B. To establish authority over patients

C. To communicate medical jargon effectively

D. To engage in casual conversation

Answers

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

Explanations

1. What should be done if a patient exhibits signs of hemodynamic instability during dialysis?

A. Continue dialysis without interruptions

B. Refer immediately to the patient's physician

C. Stop the session and monitor vitals

D. Increase the blood flow rate

When a patient shows signs of hemodynamic instability during dialysis, stopping the session and monitoring vital signs is the appropriate action. Hemodynamic instability can manifest through symptoms such as significant blood pressure drops, dizziness, or increased heart rate, indicating that the patient may not be tolerating the treatment well. By stopping the dialysis session, the healthcare provider can prevent further complications and allow for a more thorough assessment of the patient's condition. Monitoring vital signs enables the healthcare team to gather essential information about the patient's current state, which is crucial for ensuring safety and determining the next steps in management. This approach provides an opportunity to intervene appropriately, such as administering fluid boluses or medications as prescribed, before deciding on resuming dialysis or referring to a physician. It emphasizes the importance of patient safety and effective monitoring during treatment.

2. Which condition is an example of an intra-renal cause of AKI?

A. Bladder obstruction

B. Ischemic acute tubular necrosis (ATN)

C. Cardiac failure

D. Renal artery stenosis

Ischemic acute tubular necrosis (ATN) is considered an intra-renal cause of acute kidney injury (AKI) because it directly affects the kidneys' structures, specifically the renal tubules. Intra-renal causes involve damage that occurs within the kidney tissue itself, often due to factors such as lack of blood flow (ischemia), toxins, or inflammation. In the case of ischemic ATN, the renal tubules become damaged due to a decreased blood supply, which may occur in situations such as severe dehydration, sepsis, or shock. This lack of oxygen and nutrients leads to cell death and impaired kidney function. Recognizing intra-renal causes like ATN is crucial because they require specific management strategies aimed at addressing the underlying causes and supporting kidney recovery. In contrast, other options like bladder obstruction represent post-renal causes, which occur from problems that happen after urine is produced, affecting urinary outflow. Cardiac failure is primarily a systemic cause affecting kidney perfusion rather than direct kidney injury. Renal artery stenosis leads to reduced blood flow to the kidneys and is categorized as a pre-renal cause of AKI, as it results in compensatory changes without direct damage to the kidney structure.

3. What is the primary focus of DQI success in patient care?

A. Managing individual Patient First and allowing scores to follow

B. Streamlining administrative processes

C. Reducing the number of patient complaints

D. Enhancing the physical environment of care

The primary focus of DQI (Dialysis Quality Improvement) success in patient care is centered on managing individual patient needs effectively, which falls under the ethos of putting the patient first. This approach ensures that the care provided is tailored to meet the unique needs and preferences of each patient, thereby promoting better health outcomes and overall satisfaction with the dialysis experience. By prioritizing patient management, healthcare providers can implement practices that directly address the specific clinical and emotional needs of individuals undergoing hemodialysis. The idea is that when patient care is optimized, it leads to improved treatment scores and metrics, as these are inherently tied to patient satisfaction and quality of care. In this context, while streamlining administrative processes, reducing the number of patient complaints, and enhancing the physical environment of care can contribute to the overall quality of the dialysis experience, they arise as secondary outcomes of successfully managing individual patient care. Therefore, the focal point remains firmly on the patient's individual needs and experiences as the catalyst for DQI success.

4. Which of the following is not a symptom of angina?

A. Dizziness

B. Nausea

C. Confusion

D. Chest pain

In the context of angina, chest pain is a hallmark symptom, typically experienced as discomfort or pressure in the chest due to insufficient blood flow to the heart muscle. Dizziness and nausea can also be associated symptoms, as the compromised blood flow can affect overall circulation and lead to various responses from the body. Confusion, on the other hand, is not typically recognized as a symptom of angina. It may occur in more severe cardiac conditions or situations involving inadequate oxygen delivery to the brain, like during a heart attack, but it is not a direct symptom of angina itself. Thus, identifying confusion as the option that does not align with the typical presentation of angina helps clarify the defining symptoms associated with this condition.

5. What is the suggested blood flow rate for a 15 G needle gauge?

A. 200-250 mL/min

B. 250-350 mL/min

C. 350-450 mL/min

D. 450 mL/min and above

The suggested blood flow rate for a 15 G needle gauge typically ranges from 350 to 450 mL/min. This higher flow rate is appropriate for larger gauge needles like the 15 G, which allows for effective and efficient blood removal during hemodialysis. High blood flow rates are important because they ensure adequate clearance of waste products and excess fluids from the blood, optimizing the dialysis treatment process. Using a 15 G needle, a facility can achieve a better exchange of blood between the patient and the dialysis machine, the benefit of which translates into more efficient treatment sessions. Ensuring the blood flow rate stays within this range also helps minimize complications such as hemolysis, which can occur at flow rates that are too high or too low. While other options are related to different needle sizes or flow requirements, the 350-450 mL/min range reflects the optimal balance of performance and safety for a 15 G needle gauge in hemodialysis settings.

6. Which of the following is NOT an indicator of optimal nutritional status?

A. Albumin levels of 3.5

B. Adequate fat stores

C. Stable target weight

D. Appropriate appetite intake

Albumin levels are a significant laboratory indicator of nutritional status, particularly in patients undergoing dialysis. While an albumin level of 3.5 g/dL is considered within the lower range of normal, it does not necessarily indicate optimal nutritional status. Generally, higher albumin levels are associated with better nutritional health, as low albumin can suggest malnutrition or inflammation, particularly in patients with chronic diseases. In contrast, adequate fat stores, stable target weight, and appropriate appetite intake are all indicators that suggest a patient is receiving sufficient nutrition. Adequate fat stores indicate that the body has sufficient energy reserves. A stable target weight suggests that a patient's dietary intake is appropriately matched with their caloric needs, preventing excessive weight loss or gain. Appropriate appetite intake reflects that a patient is able to consume adequate food to meet their nutritional requirements. Thus, while an albumin level of 3.5 g/dL may be a clinical marker to monitor, it is not a strong indication of optimal nutritional status compared to the other factors mentioned.

7. What physiological change occurs with a decrease in blood pH?

A. Increased coagulation

B. Increased respiratory rate and depth

C. Decreased blood flow

D. Increased blood pressure

A decrease in blood pH, indicating increased acidity, triggers the respiratory system to compensate by increasing both the respiratory rate and depth. This physiological change is the body's method of attempting to correct the pH imbalance. When carbon dioxide levels in the blood rise, leading to acidosis, the body responds by increasing ventilation to expel more carbon dioxide, which helps raise the pH back toward normal levels. Maintaining acid-base balance is crucial for normal bodily functions, and the respiratory system plays a key role in this process. Increasing respiratory activity enhances oxygen supply and helps remove excess CO_2, which can counteract the effects of acidosis. This compensatory mechanism is fundamental in the context of conditions that contribute to acidosis, such as metabolic or respiratory disorders. The other choices do not directly correlate with the physiological response to decreased blood pH: coagulation does not increase as a direct result of pH change, blood flow is typically not decreased in response to acidosis alone, and blood pressure responses can vary rather than consistently increase. Thus, the increase in respiratory rate and depth is the appropriate and direct physiological response to a decrease in blood pH.

8. What is a major disadvantage of a Central Venous Catheter?

A. Higher ease of insertion

B. Risk of significant infections

C. Long time to mature

D. Requires surgical intervention

A central venous catheter (CVC) is a common method for accessing the bloodstream for hemodialysis, but one of its significant disadvantages is the associated risk of infections. The insertion site for a CVC is typically external, which increases the opportunity for bacteria to enter the bloodstream, leading to serious infections such as bloodstream infections or sepsis. These infections can complicate patient management, extend hospital stays, and increase morbidity and mortality risks. While ease of insertion and the requirement for surgical intervention each have their own considerations, they do not compare with the high stakes involved with infection. Similarly, the time required for a CVC to mature before use is not as critical as the potential for life-threatening infections. Therefore, recognizing the risk of significant infections as a major disadvantage is crucial in understanding the overall implications of using central venous catheters for hemodialysis access.

9. What happens to blood pH when there is an increase noted in the respiratory center?

A. It remains unchanged

B. It decreases

C. It increases

D. It results in CO2 accumulation

When there is an increase in activity in the respiratory center, the primary function is to regulate the levels of carbon dioxide (CO2) in the blood. As the respiratory rate increases, more CO2 is expelled from the body through exhalation. Since CO2 is in equilibrium with carbonic acid in the blood, its removal typically leads to a decrease in carbonic acid levels and an increase in blood pH. As CO2 levels drop, the acid is reduced, which causes a shift toward a more alkaline state, resulting in an increased blood pH. Therefore, an increase in the respiratory rate generally causes the blood pH to rise, indicating alkalosis rather than remaining unchanged or decreasing. In the context of the choices given, the accurate understanding of the respiratory system's regulation of blood pH indicates that increased respiratory activity is associated with decreased CO2 levels, which raises the pH rather than causing CO2 accumulation. This fundamental concept highlights the role of respiration in acid-base balance, emphasizing the correction of acidosis through enhanced ventilation.

10. When should the communication style "Guiding" be used in caregiving?

A. To facilitate behavioral change

B. To establish authority over patients

C. To communicate medical jargon effectively

D. To engage in casual conversation

Using the communication style "Guiding" is particularly effective when the goal is to facilitate behavioral change in patients. This approach encourages collaboration between the caregiver and the patient, helping to empower the patient to take an active role in their own health and decision-making. Guiding involves asking open-ended questions, actively listening, and providing support while allowing the patient to explore their thoughts and feelings about their health. This style fosters motivation and helps patients to identify their own goals, rather than simply telling them what to do. The emphasis is on helping the patient understand the reasons behind suggested behavioral changes and supporting them in making those changes themselves. In contrast, establishing authority over patients, communicating medical jargon effectively, or engaging in casual conversation do not focus on the collaborative and supportive aspects of caregiving. Authority may create resistance, medical jargon can lead to misunderstandings, and casual conversation lacks the purposeful direction needed to lead to meaningful behavioral changes.