Certification Test Prep

We Do It for Our Patients

I was told by a nurse attending a CCRN/PCCN review course that he had no intention of sitting for the certification examination. His response when I asked why was, “I will not be paid any more, my hospital does not pay for the test, and frankly I just don’t see any reason to do it.” When asked why he had come to the review course, he answered “Oh, I like to learn, it was free, and I’m being paid to be here.” I asked the nurses attending the review who had raised their hands indicating their intent to take the examination, all of whom worked for the same health system, why they were going to sit for the examination. The enthusiastic response I got was split among 2 themes: “I’m doing it for myself” and “I’m doing it for my patients.” One of the hallmarks of a professional is selflessness and lifelong learning. Striving for and achieving certification falls into both of these categories.

Adult CCRN Practice Questions

1. Following admission for syncope, a patient reports feeling dizzy. The nurse obtains the following assessment data:
   Blood pressure (BP), 82/50 mm Hg

2. A patient with a traumatic brain injury (TBI) from a fall has a urine osmolality of 200 mOsm/kg and serum sodium level of 160 mEq/L. The nurse should anticipate an order for:
   A. 5% Dextrose in water intravenous infusion (IV)
   B. 5% Dextrose in normal saline IV
   C. A fluid restriction
   D. Diuretics

3. A postoperative gastrointestinal (GI) surgery patient has the following ventilator settings and arterial blood gas (ABG) results:
   Synchronized intermittent mechanical ventilation (SIMV)
   Tidal volume (TV), 500 mL
   Respiratory rate (RR), 12/min, with no spontaneous breaths
   Fraction of inspired oxygen (FiO₂), 60%
   Positive end-expiratory pressure (PEEP), 5 cm H₂O

In addition to calling for a rapid response, the first action of the nurse should be to:
   A. Prepare a dopamine infusion
   B. Administer atropine
   C. Administer epinephrine
   D. Connect and start transcutaneous pacemaker (TCP)

Test plan topic: Cardiac, 18% of the CCRN questions

Contributors

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pH, 7.36  
Paco₂, 37 mm Hg  
Pao₂, 58 mm Hg  
HCO₃, 26 mmol/L  

Which of the following ventilator changes would provide the greatest benefit to the patient?  
A. Increase PEEP  
B. Decrease TV  
C. Decrease FIO₂  
D. Increase RR  

Test plan topic: Pulmonary, 17% of the CCRN questions  

4. A patient reports shortness of breath and has a blood pressure of 75/50 mm Hg. The following rhythm is on the monitor.  

![Rhythm on Monitor](image)  

Which of the following would be the priority of care?  
A. Vagal stimulation  
B. Amiodarone 150 mg  
C. Synchronized cardioversion at 100 joules  
D. Defibrillation at 200 joules

Test plan topic: Cardiac, 20% of the CCRN questions  

5. A patient who sustained blunt trauma from a fall down the stairs describes left shoulder pain and has no obvious shoulder injury. This symptom is most likely:  
A. Kernig’s sign, which is indicative of a spinal cord injury  
B. Virchow’s sign, which is indicative of clotting from disseminated intravascular coagulation (DIC)  
C. Kehr’s sign, which is indicative of a ruptured spleen  
D. Murphy’s sign, which is indicative of a ruptured diaphragm

Test plan topic: GI, Endocrine, Renal, Hematology, and Integumentary, 20% of the CCRN questions  

Correct Answers and Rationales for Adult CCRN Practice Questions  

1. Correct Answer: D  

Rationale  
The rhythm is a second-degree type II block. External pacing with a TCP can be used until transvenous pacing can be initiated. Dopamine (A) and epinephrine (C) might be considered, but would not be first. Atropine (B) is not recommended, as it may result in further conduction failure and a slower ventricular rate.

Sources  

2. Correct Answer: A  

Rationale  
A low urine osmolality and high serum sodium level indicate intravascular fluid depletion. In this case, the cause is probably diabetes insipidus from the TBI. Dextrose in water will help to rehydrate the patient. Administration of 5% dextrose in normal saline (B) would promote osmotic diuresis, worsening the dehydration. Fluid restriction (C) and diuretics (D) also would increase dehydration.

Source  

3. Correct Answer: A  

Rationale  
Increasing the PEEP will help to reopen closed alveoli to improve oxygenation. Decreasing the TV would decrease the Pao₂. Increasing the RR (D) would decrease the carbon dioxide further. Decreasing the Fio₂ (C) would decrease the Pao₂ further.

Sources  

4. Correct Answer: C  

Rationale  
Synchronized cardioversion is indicated for unstable supraventricular tachycardia (SVT). If the blood
pressure were stable, vagal maneuvers (A) could be used to slow conduction from the sinoatrial (SA) node to the atrioventricular (AV) node. Amiodarone (B) is used for stable wide QRS complexes and supraventricular arrhythmias. Defibrillation (D) would be used if the patient were pulseless and in ventricular tachycardia.

Sources

5. Correct Answer: C
Rationale
Kehr’s sign is a type of referred pain. The patient complains of left shoulder pain from diaphragm irritation, which could result from things such as rupture of the spleen or diaphragm. Kernig’s sign (A) is a subjective clinical sign of meningitis, and Murphy’s sign (D) is positive when the patient cannot take a deep breath (due to pain) when pressure is being applied over the liver. There is a Virchow’s triad but no Virchow’s sign (B).

Source

PCCN Practice Questions
1. A patient is confused and more withdrawn today. Which factor in the patient’s history is most likely a contributing risk factor for hypoactive delirium?
   A. History of depression
   B. History of cardiovascular disease
   C. Unplanned hospitalization
   D. Age greater than 65 years

Test plan topic: Neuro/Multisystem/Behavioral/Psychosocial, 15% of the PCCN questions

2. On postoperative day 3, a patient has onset of a high fever, increased lethargy, tachypnea, and tachycardia. The ABG results are pH 7.21, Pao₂ 72 mm Hg, Paco₂ 30 mm Hg, HCO₃⁻ 18 mmol/L. This presentation and ABG results are consistent with
   A. Metabolic acidosis with hypoxia from septic shock
   B. Respiratory acidosis from hyperventilation
   C. Metabolic alkalosis associated with diarrhea
   D. Respiratory alkalosis with hypoxia from pulmonary emboli (PE)

Test plan topic: Pulmonary, 14% of the PCCN questions

3. A progressive care nurse receives a critical value call on a new patient who has a severe metabolic acidosis and a pH of 7.14. Which potential complication should the nurse be concerned about?
   A. Hypertension
   B. Ventricular fibrillation
   C. Respiratory depression
   D. Hypokalemia

Test plan topic: Neuro/Multisystem/Behavioral/Psychosocial, 15% of the PCCN questions

4. A patient with new onset atrial fibrillation (A-Fib) reveals to the admitting nurse that he had recently had decreased exercise tolerance, exertional dyspnea, and dizziness. The nurse auscultates a systolic murmur. These symptoms may be caused by
   A. Aortic regurgitation
   B. Aortic stenosis
   C. Mitral regurgitation
   D. Mitral stenosis

Test plan topic: Cardiovascular, 33% of the PCCN questions

5. Initial vital signs on a patient admitted for altered mental status and oliguria are blood pressure of 232/123 mm Hg, heart rate 124/min, respiratory rate 12 breaths per minute, oxygen saturation 91% on room air, and an oral temperature 37.2°C (99.2°F). Acute kidney injury (AKI) is suspected from self-administered high dose of ibuprofen for back pain. Which of the following admission orders should receive the highest priority?
   A. Administer antihypertensive agents
   B. Apply oxygen by nasal cannula
   C. Insert an indwelling urinary catheter
   D. Place the patient on fall risk precautions

Test plan topic: Pulmonary, 14% of the PCCN questions
Test plan topic: Endocrine/Hematology/GI/Renal, 18% of the PCCN questions

Correct Answers and Rationales for PCCN Practice Questions

1. Correct Answer: D
Rationale
Many factors, in addition to age, increase the patient’s risk of cognitive disorders such as delirium developing. Sleep deprivation, metabolic changes, environmental changes, pain, and medications can also contribute to new onset confusion.

Source

2. Correct Answer: A
Rationale
Based on the ABG analysis, the patient is experiencing a metabolic acidosis with hypoxia most likely because of a possible postsurgical infection and/or sepsis. Hyperventilation (B) typically presents with a respiratory alkalosis, diarrhea as metabolic acidosis (C), and a PE (D) as respiratory alkalosis with hypoxia.

Source

3. Correct Answer: B
Rationale
The severe acidemia increases the patient’s risk of ventricular fibrillation developing. Acidosis causes vaso-dilatation, placing the patient at risk of hypotension, not hypertension (A). The compensatory respiratory response to metabolic acidosis would be tachypnea, rather than respiratory depression (C). Acidosis causes potassium to leave the cell, resulting in hyperkalemia, not hypokalemia (D).

Sources

4. Correct Answer: B
Rationale
The classic clinical manifestations of angina, syncope, and heart failure are often late signs associated with advanced aortic stenosis. Earlier symptoms include a systolic murmur, new onset atrial fibrillation, exertional dyspnea and dizziness, exercise intolerance, and complaints of lightheadedness. Symptoms associated with aortic regurgitation (A) include angina and chest tightness with exercise, fatigue, heart palpitations, and shortness of breath with exertion or when lying down. Symptoms of mitral regurgitation (C) also include fatigue and acute shortness of breath, lower extremity edema, and diuresis when resting. Patients with mitral stenosis (D) complain of shortness of breath, fatigue, heart palpitations, and congested cough.

Source

5. Correct Answer: A
Rationale
The AKI is the admission diagnosis, but the hypertensive crisis is the most important priority. Oxygen (B), catheter insertion (C), and safety (D) are all important, but the blood pressure management is the most immediate concern.

Source

AACN Certcorp publishes a study bibliography that identifies the sources from which items are validated. The document may be found in the AACN Certification exam handbook. The contributor of each question written for this column has listed the source used in developing each item. CCN

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