

TNCC 7th Edition: Practice Test

Annotated Answer Key

1. What is the key to a high performing trauma team?

- a. Individual goals
Rationale: Effective teams are group driven with a shared mental model (p. 5).
- b. Use of the SBAR tool
Rationale: Effective team performance includes the consistent use of standardized, evidence-based communication tools. SBAR is an example of one of these tools but not the only one (p. 7).
- c. Identification of a single decision maker
Rationale: An effective team leader makes decisions through the collective input of the entire team (p. 5).
- d. **Consistent communication**
Rationale: Communication, cooperation, and coordination are the foundations of successful teamwork in trauma care (p. 6).

2. When obtaining a history for an injured patient, determining energy transfer through biomechanical data helps the nurse to:

- a. **anticipate the types of injury that may be present.**
Rationale: Mechanism of injury and energy transfer can help predict potential injuries and injury patterns (p. 29).
- b. decide if law enforcement should be notified.
Rationale: Various aspects of the history of the traumatic event may help determine the need for law enforcement, but mechanism of injury and energy transfer predict potential injuries and injury patterns (p. 29).
- c. determine needed laboratory tests.
Rationale: Mechanism of injury and energy transfer can help predict potential injuries and injury patterns, which in turn help direct the need for laboratory tests (p. 29).
- d. predict the need for a surgical procedure.
Rationale: Mechanism of injury and energy transfer can help predict potential injuries and injury patterns, which in turn help direct the need for surgical procedures (p. 29).

3. The major preventable cause of death in the trauma patient is:

- a. airway compromise.
Rationale: Uncontrolled hemorrhage is the major cause of preventable death after injury, not airway compromise (p. 40).
- b. ineffective ventilation.
Rationale: Uncontrolled hemorrhage is the major cause of preventable death after injury, not ineffective ventilation (p. 40).
- c. secondary head injury.
Rationale: Uncontrolled hemorrhage is the major cause of preventable death after injury, not secondary head injury (p. 40).
- d. **uncontrolled hemorrhage.**
Rationale: Uncontrolled hemorrhage is the major cause of preventable death after injury, so assessment to identify uncontrolled hemorrhage is key to the initial assessment process (p. 40).

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4. **The across-the-room observation step in the initial assessment provides the opportunity to:**
- assess for uncontrolled internal hemorrhage.
Rationale: The across-the-room observation is done to identify uncontrolled external hemorrhage, not internal hemorrhage (p. 40).
 - accurately triage the patient.
Rationale: The across-the-room observation is done to identify uncontrolled external hemorrhage. It does not affect triage (p. 40).
 - reprioritize circulation before airway or breathing.**
Rationale: The across-the-room observation is done at the beginning of the primary survey to rapidly assess the need to reprioritize circulation before airway or breathing. This is done if uncontrolled external hemorrhage is identified (p. 40).
 - activate the trauma team.
Rationale: The trauma team is activated before arrival of the patient (p. 40).
5. **Which of the following accurately describes ventilation principles associated with a bag-mask device?**
- Ventilate at a rate of 10 to 12 breaths/min**
Rationale: When patient ventilation is ineffective, the best intervention is to assist ventilations at 10 to 12 breaths/min or one every 5 to 6 seconds (p. 44).
 - Deliver 100% oxygen
Rationale: Delivery of oxygen is helpful for improving oxygenation, not for ventilation (p. 44).
 - Compress the bag-mask device completely
Rationale: To avoid forcing air into the stomach, increasing the risk for aspiration, compress the bag just enough to produce visible chest rise (p. 62).
 - Maintain the oxygen saturation level between 92% and 94%
Rationale: Delivery of oxygen is helpful for improving oxygenation, not for ventilation. Additionally, oxygen saturation is best maintained between 94% and 98% to prevent hyperoxia (p. 61).
6. **Which of the following is the best measure of the adequacy of cellular perfusion and helps to predict the outcome of resuscitation?**
- End-tidal carbon dioxide
Rationale: Carbon dioxide measurement is valuable to reflect ventilation and pulmonary function, but in order to measure cellular perfusion, base deficit is the best value (pp. 65–66).
 - Hypoxia
Rationale: Hypoxia is associated with poor cellular perfusion, and the best method of determining cellular hypoxia is with a base deficit (p. 65).
 - Base deficit**
Rationale: Base deficit serves as an endpoint measurement of the adequacy of cellular perfusion and predicts the success of the resuscitation (p. 65).
 - Oxygen saturation
Rationale: Oxygen saturation is valuable to measure and trend oxygenation within the bloodstream, but does not reflect cellular perfusion (p. 65).

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7. According to the World Health Organization pain relief ladder, adjuvant medications are:
- Treatment for symptoms associated with pain**
Rationale: Adjuvant medications are not originally intended to treat pain but can help manage pain by treating associated symptoms, such as nausea, anxiety, and others (p. 98).
 - An alternative to nonpharmacologic interventions
Rationale: Adjuvant medications are given not in place of but in addition to analgesia (pp. 98–99).
 - Given for sedative properties
Rationale: Adjuvant medications are given for a variety of symptoms, not only for sedation (p. 98).
 - Most effective for severe pain
Rationale: Adjuvant medications are considered at all levels of pain severity (p. 99).
8. In a patient with severe traumatic brain injury, hypocapnia causes:
- respiratory acidosis.
Rationale: Hypercapnia from inadequate ventilation, not hypocapnia, causes respiratory acidosis (p. 334).
 - metabolic acidosis.
Rationale: Metabolic acidosis results from tissue hypoperfusion and oxygen deficit, not hypocapnia (p. 334).
 - neurogenic shock.
Rationale: Neurogenic shock is associated with spinal cord injuries and results in generalized vasodilation. Hypocapnia causes vasoconstriction (pp. 75, 109).
 - cerebral vasoconstriction.**
Rationale: Hypocapnia, or low levels of carbon dioxide, will cause vasoconstriction, especially in the cerebral vasculature (p. 109).
9. A patient with a knife injury to the neck has an intact airway and is hemodynamically stable. He complains of difficulty swallowing and speaking. Further assessment is indicated next for which of the following conditions?
- Damage to the spinal cord**
Rationale: Penetrating neck trauma may include concurrent injuries to the spinal cord, airway, or vascular neck structures. With an intact airway and hemodynamic stability, the other common concurrent injury is to the spinal cord (p. 143).
 - An expanding pneumothorax
Rationale: Penetrating neck trauma may include concurrent injuries to the spinal cord, airway, or vascular neck structures. Pneumothorax is less likely because of anatomic position (p. 143).
 - Laceration of the carotid artery
Rationale: Penetrating neck trauma may include concurrent injuries to the spinal cord, airway, or vascular neck structures. With hemodynamic stability, carotid laceration is unlikely (p. 143).
 - Injury to the thyroid gland
Rationale: Penetrating neck trauma may include concurrent injuries to the spinal cord, airway, or vascular neck structures. Thyroid gland injury is possible given the anatomy, but a spinal cord injury is a higher priority (p. 143).

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10. What is the appropriate technique to palpate the pelvis for stability?

- a. Apply gentle pressure over the iliac wings downward and laterally
Rationale: To test for pelvic instability, gentle pressure is applied over the iliac wings downward and medially, not laterally (p. 159).
- b. **Apply gentle pressure over the iliac wings downward and medially**
Rationale: The test for pelvic instability, only if there is not an obvious fracture, is done with gentle pressure over the iliac wings downward and medially. This is done only once to limit any possible damage (p. 159).
- c. Apply firm pressure over the iliac wings downward and laterally
Rationale: To test for pelvic instability gentle, not firm, pressure is applied over the iliac wings downward and medially, not laterally (p. 159).
- d. Apply firm pressure over the iliac wings downward and medially
Rationale: To test for pelvic instability gentle, not firm, pressure is applied over the iliac wings downward and medially (p. 159).

11. A patient with a spinal cord injury at C5 is being cared for in the emergency department while awaiting transport to a trauma center. Which of the following represents the highest priority for ongoing assessment?

- a. **Monitor respiratory status**
Rationale: Spinal cord injuries at C3 to C5 can cause the loss of phrenic nerve function and lead to respiratory arrest (p. 182).
- b. Administer balanced resuscitation fluid
Rationale: Fluid resuscitation may be necessary, but with the placement of the spinal cord injury, respiratory function is the highest priority (p. 182).
- c. Perform serial assessments of neurologic function
Rationale: Neurologic function may change, and trending any changes is important. However, with the placement of the spinal cord injury, respiratory function is the highest priority (p. 182).
- d. Observe for signs of distributive shock
Rationale: Distributive shock may develop, but with the placement of the spinal cord injury, respiratory function is the highest priority (p. 182).

12. What is the first step to stop a hemorrhage associated with an amputated extremity?

- a. Elevate the extremity to the level of the heart
Rationale: Elevation of the residual limb after amputation is done with direct pressure. When compartment syndrome is suspected, it is to the level of the heart (p. 201).
- b. **Initiate direct pressure**
Rationale: The first step in controlling any bleeding, including bleeding from amputation, is direct pressure. If that is not adequate, the application of a tourniquet may be needed (p. 201).
- c. Apply a tourniquet
Rationale: If direct pressure and elevation are not adequate, the application of a tourniquet may be needed. However, applying direct pressure is the first step in controlling bleeding (p. 201).
- d. Splint the residual limb
Rationale: If the residual limb has a fracture, a splint may be needed, but the first step to control a hemorrhage is to apply direct pressure (p. 201).

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13. Treatment for frostbite includes:

- a. warm the affected part slowly over 30 to 60 minutes
Rationale: Warming for frostbite is done rapidly, over 15 to 30 minutes (p. 210).
- b. use gentle friction to improve circulation.
Rationale: Friction, even gentle friction, is avoided to prevent tissue damage (p. 210).
- c. **administer aspirin.**
Rationale: With frostbite, thrombus formation is a risk. Aspirin or nonsteroidal anti-inflammatory medication can be administered (p. 210).
- d. leave blisters intact.
Rationale: For blisters associated with frostbite, extract the fluid from clear blisters and keep hemorrhagic blisters intact (p. 210).

14. A 30-week pregnant trauma patient's vital signs include a blood pressure of 94/72 mm Hg and a heart rate of 108 beats/min. Fetal heart tones are 124 beats/min. The emergency nurse interprets the patient's hemodynamic findings as an indication of which of the following?

- a. Decompensated shock
Rationale: These values represent normal vital signs in the pregnant patient (pp. 226, 228).
- b. **Normal vital signs in pregnancy**
Rationale: In pregnancy, the resting heart rate increases by 10 to 20 beats/minute and a small decrease in systolic blood pressure and a larger decrease in diastolic blood pressure. Normal fetal heart rate is between 120 and 160 beats/minute (pp. 226, 228).
- c. Placental abruption
Rationale: These values represent normal vital signs in the pregnant patient (pp. 226, 228).
- d. Supine hypotension syndrome
Rationale: These values represent normal vital signs in the pregnant patient (pp. 226, 228).

15. While performing an assessment on a 13 month-old involved in a motor vehicle collision, the nurse identifies which of the following findings from the patient as a potential sign of mental status changes?

- a. Sunken fontanel
Rationale: A bulging fontanel is often a sign of intracranial bleeding. Mental status changes may be the result (pp. 239, 242).
- b. Crying, but consolable
Rationale: Crying in an infant or toddler is normal, especially when consolable. Inconsolability is a sign of mental status changes in an infant or toddler (p. 236).
- c. Hyperglycemia
Rationale: Hypoglycemia is more common than hyperglycemia in the pediatric trauma patient and hypoglycemia is related to mental status changes (p. 239).
- d. **Cooperation with the assessment**
Rationale: An older infant or toddler will recognize his or her caregiver and be cautious of strangers. A cooperative 13-month-old patient could be an early sign of hypoxia or change in mental status (p. 236).

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16. What is the best position to maintain an open airway in the bariatric patient?

a. Prone

Rationale: The reverse Trendelenburg position, not the prone position, will benefit both airway maintenance and work of breathing in the bariatric patient (p. 272).

b. Supine

Rationale: The supine position increases work of breathing and contributes to obstruction. The reverse Trendelenburg position, not the supine position, will benefit both airway maintenance and work of breathing in the bariatric patient (p. 271–272, 277).

c. **Reverse Trendelenburg**

Rationale: The reverse Trendelenburg position will benefit both airway maintenance and work of breathing in the bariatric patient (pp. 272, 277).

d. Right lateral recumbent

Rationale: The reverse Trendelenburg position, not the prone position, will benefit both airway maintenance and work of breathing in the bariatric patient (pp. 272, 277).

17. The nurse is obtaining a history for a patient who presents following sexual assault. This history is completed using which of the following techniques?

a. Bring the family in to the interview room

Rationale: The patient is allowed privacy, and the family is offered a waiting room. If the patient wishes support from a family member, it is her or his decision, not the nurse's (p. 289).

b. **Use direct quotes to record information**

Rationale: Use of direct quotes will assure the most accurate account of the patient's experience (p. 289).

c. Assure law enforcement and social services wait until the nursing history is completed

Rationale: Some recommend delaying the history until all necessary personnel, including law enforcement can be present to minimize the trauma of repeating the description of the event (p. 289).

d. Provide food and drink before creating a rapport

Rationale: Food and drink may be important, but if evidence is needed from the mouth, eating or drinking is delayed until after the history is obtained (p. 290).

18. A trauma nurse cared for a child with devastating burns 2 weeks ago. She called in sick for a couple of days and is now back working on the team. Which of the following behaviors would indicate this nurse is coping well?

a. **She is talking about taking the emergency nursing certification examination**

Rationale: This is an indication she is taking positive steps to advance her own practice (p. 304).

b. She keeps requesting to be assigned to the walk-in/ambulatory area

Rationale: This indicates she is still not ready to return to her previous engagement in her job (p. 303–304).

c. She is impatient and snaps at coworkers

Rationale: Irritability and frustration are ongoing signs of burnout (p. 303–304).

d. She is thinking about transferring out of the emergency department

Rationale: Decreased satisfaction with her job is a sign of burnout (p. 303–304).

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19. Following a bomb explosion, fragmentation injuries from the bomb or objects in the environment are examples of which phase of injury?

a. Primary

Rationale: The primary phase of a blast results from impact of the over pressurization wave with body surfaces. Injuries include blast lung, tympanic membrane rupture, abdominal hemorrhage, globe rupture, and mild traumatic brain injury (p. 34).

b. **Secondary**

Rationale: The secondary phase of a blast results from flying debris and bomb fragments causing lacerations or penetrating injuries (p. 34).

c. Tertiary

Rationale: The tertiary phase of a blast results from individuals being blown back and impacting walls or the ground (p. 34).

d. Quaternary

Rationale: The quaternary phase of a blast results from explosion related illness or injury including burns, crush injuries, brain injury, asthma, or COPD (p. 34).

20. A patient is diagnosed with small subdural hematoma with a history of a trip and fall in which he hit his head on the sink two weeks ago. He is waiting for an inpatient bed. The nursing shift report indicates that he did not sleep last night and has been very anxious. As the nurse begins an assessment, he vomits and states he couldn't sleep because a young child kept coming in his room during the night. What is a likely cause for these signs and symptoms?

a. Increased intracranial pressure

Rationale: Signs of increased intracranial pressure include headache, nausea and vomiting, amnesia, behavioral changes, altered level of consciousness (p. 109).

b. **Alcohol withdrawal**

Rationale: Alcohol withdrawal is a common delayed condition because symptoms are difficult to identify early. Signs include autonomic hyperactivity, hand tremors, nausea or vomiting, psychomotor agitation, anxiety, insomnia, hallucinations, or seizures (p. 332).

c. Rhabdomyolysis

Rationale: Signs of rhabdomyolysis includes muscle pain or weakness, dark red or brown urine, general weakness or malaise, and elevated creatinine kinase levels (p. 198).

d. Pulmonary embolus

Rationale: Signs of pulmonary embolus include anxiety, pleuritic chest pain, dyspnea, hypoxemia, hemoptysis, cough, orthopnea, adventitious lung sounds, decreased lung sounds, jugular vein distension, or hypotension (p. 336).