Pediatric Education for Prehospital Professionals

PEPP Written Evaluation Pretest
ALS PRETEST

Questions 1 through 3 refer to the following information.
A 2-year-old girl who is having difficulty breathing and a barky cough has had a fever and
runny nose for the past 3 days. She is alert and sitting on her mother’s lap. Assessment
reveals that she has warm, flushed skin, is using her abdominal muscles to breathe, and has
increased work of breathing. She has a blood pressure of 88/66 mm Hg, a pulse of 128
beats/min, and respirations of 48 breaths/min.

1. This patient is likely to have:
   a. stridor.
   b. delayed capillary refill time.
   c. weak pulses.
   d. the ability to tolerate oral feedings.

2. Abdominal breathing in this patient should be viewed as:
   a. normal finding for a toddler.
   b. sign of impending respiratory failure.
   c. sign of decreased perfusion to the respiratory center.
   d. compensatory mechanism to increase the volume of air inhaled and
      respiratory rate.

3. The first step in treatment is to:
   a. administer a nebulizer treatment with a beta-agonist medication.
   b. administer humidified oxygen via blow-by method.
   c. suction the oropharynx for secretions.
   d. deliver bag-valve-mask ventilation.

4. A 6-year-old boy who was struck by a car while he was riding his bicycle is
   unresponsive and has pale, cool skin. Assessment reveals abrasions to his left shoulder
   and back and a swollen, deformed left thigh. He has a blood pressure of 74/62 mm Hg,
   a pulse of 152 beats/min, and respirations of 44 breaths/min without increased work
   of breathing. What do these findings tell you about the patient’s condition?
   a. He is unresponsive and his skin is cool because of a low body temperature from
      being outside.
   b. His heart rate is fast because of pain in his shoulder and leg.
   c. His breathing is fast because the impact affected the respiratory center in his
      brain.
   d. His blood pressure is low because compensatory mechanisms for blood loss are
      failing.
Questions 5 and 6 refer to the following information.
A 3-month-old infant who is extremely lethargic has had a cough, vomiting, and diarrhea for the past 3 days. Assessment reveals that he responds to pain, has mottled skin color, and a capillary refill time of 4 seconds. He has a blood pressure of 74/60 mm Hg, a pulse of 190 beats/min, and rapid respirations (60 breaths/min) without increased work of breathing.

5. The tachycardia in this infant is most likely due to:
   a. anxiety.
   b. hypovolemia.
   c. pneumothorax.
   d. swelling of the brain.

6. The appropriate initial treatment is to:
   a. administer 100% oxygen by mask.
   b. administer dopamine intravenously.
   c. administer epinephrine via an intraosseous needle.
   d. perform endotracheal intubation.

7. Which of the following findings in a 2-year-old child assists in identifying the cause of a grand mal seizure?
   a. Fever
   b. Crackles in the lungs
   c. Abdominal tenderness
   d. Cardiac dysrhythmia

8. Activated charcoal is contraindicated in a patient who has ingested a toxic substance if:
   a. there is a history of abdominal surgery.
   b. there is a history of diarrhea or vomiting.
   c. the substance was corrosive.
   d. the substance was ingested approximately 1 hour ago.

9. A 10-year-old girl is unresponsive when she surfaces after diving into a quarry. Bystanders report that she was shaking all over as they pulled her out of the water. The first step in caring for this patient is to:
   a. stabilize her cervical spine to reduce the risk of further spinal injury.
   b. elevate her head to reduce the risk of aspiration.
   c. turn her on her side to allow any water to drain from her mouth.
   d. open her mouth and insert an oropharyngeal airway to maintain a patent airway.
Questions 10 through 12 refer to the following information. An 8-year-old boy fell 7 feet out of a tree, landing on his right arm and falling to his right side. He is crying and appears agitated. Assessment reveals that he has pale, warm skin, multiple abrasions on his right shoulder and hip, and a deformed right forearm. He has a blood pressure of 92/74 mm Hg, a pulse of 128 beats/min, and respirations of 32 breaths/min.

10. What is the best approach to conducting the assessment of this patient?
   a. Telling him he must lie still or he may become paralyzed
   b. Exposing only those areas currently being assessed and then covering them
   c. Asking him if it is okay to listen to his lungs and touch his chest and stomach
   d. Asking him what hurts the most and begin by assessing that area of the body

11. After completing your initial assessment, the first step in caring for this patient is to:
   a. manually stabilize the cervical spine to reduce the risk of spinal injury.
   b. initiate hyperventilation to reduce the accumulation of acids in the body.
   c. cover him with blankets to prevent heat loss.
   d. place him in a position of comfort to decrease anxiety.

12. What is the most likely cause for the abnormal appearance of this patient?
   a. Secondary brain injury
   b. Hypoxia
   c. Pain
   d. Hypothermia

13. What information is important to obtain about a child with smoke inhalation?
   a. Possibility of concurrent trauma
   b. Position of the patient when found
   c. History of recent cold symptoms
   d. Location in the room where the patient was found

14. A 6-month-old infant who is being cared for by a baby-sitter is unresponsive and has warm, pink skin and irregular respirations without increased work of breathing. The baby-sitter appears anxious and frustrated and explains that the infant had been crying for hours and would not stop. The baby-sitter states, “I couldn’t get her to stop crying. I tried everything. All of a sudden she got really quiet, and I couldn’t wake her up. Please help her. I can’t take her crying any more.” The baby-sitter states that she does not think that the infant has been sick recently. The infant’s altered level of consciousness is most likely due to:
   a. toxic exposure.
   b. shaken baby syndrome.
   c. seizures.
   d. respiratory failure.
15. An 18-month-old boy who reportedly fell down the stairs earlier in the day “just isn’t acting right,” according to his caregivers. Assessment reveals multiple bruises on his thighs and back and a deformity of his right thigh. He is alert and crying. What is the best way to interact with the caregivers?

a. Confront them by telling them you know that this injury could not have occurred from a fall; therefore, you are obligated to take him to the hospital.

b. Ask them why they waited so long to call for help; the delay has made the child very sick; therefore, you will need to administer oxygen and establish an IV line.

c. Contact the local law enforcement agency to request that the caregiver be arrested while you transport the child.

d. Explain that you are very concerned about the child’s condition and that he needs to be examined at the hospital for a possible a broken leg.

16. A woman who is about to deliver a baby at home reports that the fluid was thick and green when her bag of waters broke. The most important treatment of the newborn is to:

a. vigorously dry and warm the baby.

b. copiously suction the mouth and nose.

c. administer oxygen by nasal cannula at 4 liters/min.

d. calculate the APGAR score.

17. Ascertain the due date of a newborn during an impending delivery helps you to:

a. assemble the correct size of equipment to care for the baby.

b. decide whether the baby will be delivered at the scene or if there is time to transport the mother to the hospital.

c. decide if an on-scene delivery is needed, particularly if the infant is premature, as the labor is often shorter for these infants.

d. determine if meconium aspiration may have occurred.

18. Assessment of a newborn 5 minutes after delivery reveals cyanosis of the hands, feet, trunk, and face. Vital signs include a pulse of 160 beats/min and respiratory rate of 44 breaths/min. Treatment of this newborn includes:

a. initiating bag-valve-mask ventilation.

b. performing intubation and positive pressure ventilation.

c. applying free-flow oxygen by mask at 5 liters/min.

d. reassessing the skin color in 5 minutes and then initiating oxygen therapy if needed.

19. An infant less than one month should be evaluated by a physician if which of the following signs or symptoms is present?

a. Use of abdominal muscles to breathe

b. Temperature of 37°C (98.6°F)

c. Acting fussier than usual

d. Refuses a pacifier

20. A 3-year-old boy who has a tracheostomy has had difficulty breathing and coughing for 2 days because of increased secretions. He is on continuous oxygen. His mother
states that his breathing is getting much worse. Assessment reveals that he is lethargic, has cool, mottled skin, and has copious secretions in the tracheostomy tube. Which of the following signs suggests significant obstruction of the tracheostomy tube?

a. A slow heart rate and poor air exchange  
b. Irregular respirations and wheezing  
c. Crackles and decreased breath sounds  
d. Unequal chest rise and wheezing

21. During transport, what is the correct way to manage the respiratory status of a boy who is on a ventilator but also breathes on his own?

a. Allow the patient to remain on the ventilator if he is not in respiratory distress.  
b. Immediately deliver bag-valve-mask ventilation because you may not be familiar with the ventilator.  
c. Switch the patient to oxygen by blow-by method because the ventilator will not work in the ambulance.  
d. Decrease the flow rate as the oxygen in the ambulance is more potent and requires a lower flow rate.

22. What is the danger of using a mask that is too large on a child who requires ventilatory assistance?

a. Eye injuries may occur from the mask touching the globe.  
b. It will be more difficult to obtain a seal for ventilation.  
c. More pressure will need to be applied to obtain a mask seal, which may cause dislocation of the mandible.  
d. If the mask extends across the eyes, it may exert pressure and stimulate the vagus nerve.

23. What is the correct method to confirm proper placement of an endotracheal tube?

a. Palpate for chest rise and fall over the anterior chest and abdomen.  
b. Observe for gastric distention, which indicates leakage of air around the tube in the trachea.  
c. Auscultate the anterior chest and midabdominal area for the presence of bubbling or gurgling sounds.  
d. Auscultate for bubbling or gurgling sounds over the epigastrium and for breath sounds at the midaxillary regions.
24. When should the child’s head be secured to the spine board during the immobilization procedure?

   a. After the body straps and lateral stabilization devices have been applied
   b. After the body straps have been applied, but before the lateral stabilization devices to ensure that the tape is applied tightly
   c. Before any straps or lateral stabilization devices have been applied
   d. If the child is quiet, the head does not need to be secured once lateral stabilization devices are applied

25. Which of the following substances can be infused via an intraosseous needle?

   a. All medications and intravenous fluids
   b. All medications except sodium bicarbonate and dextrose
   c. Fluids or medications that are not acidic
   d. Only medications and fluids that have a neutral pH