NWC EMSS Continuing Education
August 2017 Pediatric Trauma
CE Credit Questions

Name:	Date submitted:
EMS Agency/hospital:	Credit awarded (date):
EMSC/Educator reviewer:	Returned for revisions:
	Revisions received:

This packet should take 2 hours to complete – which earns you the equivalent of the 2 hour live CE class.
Sources: Aug CE handout, slide deck (website); Pediatric SOPs

1. Two benefits to identification of mechanism of injury are:

_____

_____

2. Prior to a BP, what 2 assessments provide reliable information about a patient's perfusion?

_____

_____

3. According to Peds ITC SOP, for what reason should EMS establish vascular access for a pediatric patient who has sustained trauma?

_____

4. When exposing the pediatric patient is necessary for trauma assessment, what action must be taken to prevent hypothermia, once the assessment has been done?

_____

5. List a unique finding about 1) pediatric aged patients' heads and 2) their center of gravity that leads to a high risk for head injury.

_____

_____

6. Secondary brain injury results from inadequate management of (4):

_____

_____

_____

_____

7. Prevention of secondary brain injury is accomplished by what 3 EMS interventions?

_____

_____

_____

8. List 2 head-related injuries that may result in hypovolemia in the younger / pediatric patient.

_____

_____

9. The neurologic disturbances exhibited in patients with concussion are due to disruption of (3)

_____

_____

_____

10. According to the *Consensus* document, is a direct blow to the head necessary for concussion to occur?

_____

11. List three other *features* of concussion, not including the statement in question 14.

_____

_____

_____

12. List 3 symptoms that patients with concussion may complain of / report:

_____

_____

_____

13. What are 2 recently identified neuro deficits that patients with concussion may exhibit, according to the abstract titled *Vestibular and vision deficits following concussion in children under 12*?

_____

_____

14. EMS is called for a 14 y/o youth league hockey player who crashed sideways into the boards/wall, appeared to lose consciousness, and fell to the ice. He is awake but confused and slow to respond. He is trying to get up to resume playing, and his father is there yelling "Get back in there, you pansy!". What 3 recommendations does EMS have the responsibility to support in the best interest of this patient?

_____

_____

_____

15. A 6 yr. old is struck by a car while crossing the street. Posted speed limit is 35 MPH. What part of the child's body would you expect to incur impact first, and with what part of the car?

_____

16. What injuries should you anticipate with the above event?

_____

17. What ***body parts*** would likely impact what ***part of the car*** next, and ***what injuries*** should you anticipate?

_____

_____

18. As a result of being thrown downward (3rd impact), what injuries would you have a high suspicion for for the patient in question 16?

_____

19. For what anatomic/physiologic reason are underlying structures in the chest/thorax and abdomen prone to injury in kids?

_____

20. What should the presence of fractured ribs in a child tell you about energy transmitted to the chest?

_____

21. Assessment of the chest in suspected trauma requires observation, inspection and palpation. List one assessment you would make for each of these 3 assessment techniques.

Observation: _____

Inspection: _____

Palpation _____

22. Considering your answer to qu. 20, what do we know about external signs of trauma and presence of significant internal traumatic injury?

_____

23. Because pediatric aged patients' neck muscles are weak, spine cartilage and ligaments are elastic, and facets are flat, what action occurs in the vertebrae that may cause injury to the spinal cord?

_____

24. Assessment of motor and sensory as part of "D" in C-A-B-C-D-E is important for what reason when assessing a pediatric patient for spine injury?

_____

25. List 2 guidelines / cautions for SMR strap placement with regards to airway and breathing.

_____

_____

26. Children compensate for volume loss by increasing HR and vasoconstricting. What are three assessments you should make to detect whether these compensatory mechanisms are occurring (excluding BP)?

_____

_____

_____

27. If a child's BP is taken with a cuff that is too small, how will the resulting BP reading be affected?

_____

28. Which BP cuff should you choose if one is too small and the next size is too big?

_____

29. What cuff and upper arm measurement should be assured when assessing a BP cuff for appropriate size?

_____

30. Indicate whether the following perfusion assessments indicate compensated, decompensated, or irreversible shock.

Cap refill > 2 sec _____

BP > (70 + 2X age in yrs) but < (90 + 2X age in years) _____

Decreased pulse pressure _____

Pale, mottled skin _____

Cool (not cold) skin _____

Weak peripheral pulses _____

31. The ultimate goal of the NHTSA guidelines for pediatric transport is to (3)

_____

_____

_____

Answer questions 34 - 35 for when "The Ideal is not Practical or Achievable" (the "Ideal" = the ACR4).

32. Explain the use and positioning of stretcher straps when transporting a child on the stretcher who does ***not*** require continuous and or intensive medical monitoring and interventions (NHTSA guidelines).

_____

33. For a child whose condition requires continuous medical monitoring and interventions, what is the recommended action when straps must be removed for interventions, etc?

_____

34. For the child whose condition requires spine motion restriction, and a *pediatric-sized spine board* is available, what two steps should be taken to secure the board to the ambulance stretcher?

_____

_____

35. If no pediatric spine board is available and the child must be secured to the adult spine board, what modification should be employed to make sure the device fits the child?

_____

36. Why is the ACR4 child restraint system especially desirable when transporting a pediatric patient who requires continuous medical monitoring and interventions?

_____

Please refer to the following scenario to answer questions 37 – 40.

You respond to a call for a child who fell. The outdoor temperature is 78º. You find a motionless 9 y/o boy lying in the grass, face down, under a large tree. An adolescent girl who called 911 says they were climbing up when her brother slipped and fell. She shows you the branch the boy was on, which is 15-20 feet off the ground. The patient appears limp. The girl states he has been unconsciousness since he fell, and she has not touched or moved him. He is bleeding briskly from a deep ~ 4 inch laceration on the left side of his head. His breathing is slow, shallow and labored, with audible snoring. Pulse ox is 90%. His skin is pale, and when he is touched, his skin is cool. Peripheral pulses are fast and barely palpable. Cap refill is 3 sec. Estimated wt is 85 lb (38 kg).

37. Describe one action you would take to address the above findings for each of the following assessment steps (C-A-B-C-D-E):

C: _____

C-spine: _____

A: _____

B: _____

38. What SBP reading correlates with hypotension for this patient? (Calculate below)

_____

39. Venous access is obtained successfully. Which fluid will you choose? (circle one)

Warm .9 NS Room temp .9 NS Cooled .9 NS

40. VS are obtained. BP 82/60, HR 130, RR assisted q 3-5 sec. Calculate the volume of fluid to be administered to this patient.

_____

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