Northwest Community EMS System

Continuing Education Class Credit Questions for October 2014
Spine Motion Restriction (Didactic)

Name (PRINT):	Date submitted:
Affiliation:	Rating: [ ] Complete [ ] Incomplete

Reminder: You must schedule to take the class post-test with your assigned hospital EMS Coordinator/educator or their designee after this packet has been approved as complete.

The answers are found in the October 2014 class handout, supplemental materials, NWC EMSS Policy Manual, and/or the SOPs. All are available on the website at www.nwcemss.org

1. In review of the article written by Dr. Brian Bledsoe, "The Evidence against Backboards," what is the best accepted practice of medicine in the 21st century? (EMS World-Google it!)

   _____

2. Is there any scientific evidence that the backboard effectively immobilizes the cervical spine? (EMS World)

   YES **NO**

3. The truth is in the evidence: "There is evidence to support that back boarding a pt can improve their outcome."

   TRUE **FALSE** (PP)

4. Name two main functions of the vertebral column. (PP)

   _____

   _____

5. Identify 6 degrees of freedom identified with flexibility of motion for the spine.

   _____ _____ _____

   _____ _____ _____

6. In light of the fact that the cervical spine is a very small in portion of the vertebral structure, why is there such great concern for injury? (PP)

   _____

   _____

   _____

7. Identify the role of the spinal cord as noted in the presentation? (PP)

   _____

   _____

   _____

   _____

8. Which portion of the nervous system is characterized in the PP presentation by a network of motor and sensory nerve fibers that connects the central nervous system to the rest of the body? (PP)

_____

9. Identify 6 signs or symptoms that may indicate a pt who sustained a significant mechanism of injury may have a SCI? (Hint: most start with the letter P)

_____ _____ _____

_____ _____ _____

10. While anterior, posterior and central cord syndromes present with different symptoms, all have a very good prognosis.

TRUE **FALSE**

11. Identify 3 characteristics that describe a person consistent with Brown-Sequard Syndrome? (PP)

_____

_____

_____

12. Why do patients in neurogenic shock become bradycardic? _____

_____

13. In accordance with system SOP, what is the first line treatment for a pt presenting in neurogenic shock with profound bradycardia?

_____.

14. When treating a pt with neurogenic shock who remains hypotensive, the initial dose of dopamine is_____

15. Describe in your own words, based on the slide presentation, how PHTLS changed their recommendations regarding SMR in light of the research completed by Haut et al for penetrating trauma. (PP/handout p. 16)

_____

_____

_____

16. What four side effects have an increased occurrence, according to NAEMSP position statement's resource document, with prolonged positioning of a pt on a backboard?

17. Describe in your own words how each of the above mentioned side effects might occur with greater frequency when pts are positioned on backboards for a prolonged period. (PP)

18. What findings did the NAEMSP resource document identify in the research by Haut related to risk of injury associated with penetrating trauma and outcomes? (PP/p. 16 handout) _____

19. As a result of these findings, what is their new recommendation for isolated penetrating trauma regarding immobilization? (PP)

20. "Most EMS personnel don't realize that prehospital decisions can ***significantly*** impact later care & costs." Explain in your own words how this may be considered true. (PP)

21. In accordance with NAEMSP, what hospital practice recommendations are given for pts received on long backboards? (PP)

22. What 8 items listed in system memo #349 regarding spinal immobilization has remained the same?

23. What has changed regarding immobilization within the system? (Memo #349)

24. For most pts, the _____ or the _____ _____ is now your backboard for transport purposes. (Fill in the blank. System memo)

25. What 6 areas are assessed in order to determine reliability of a pt with an uncertain mechanism possibly requiring SMR? (p. 45 SOPs)

26. What 3 additional areas must be assessed following the reliability for a pt with an uncertain mechanism in order to determine if a pt requires SMR? (p. 45 SOPs)

_____ _____ _____

27. If a pt with a mechanism of injury consistent with trauma to the cervical spine is found in a position in which the head is not in neutral alignment with pain, how should the pt be immobilized in order to restrict movement? (System Memo)

_____

_____

28. If a pt is found either unconscious or unreliable with a suspicion for any type of trauma, how should they be cared for pertaining to spine motion restriction? (p. 8 handout)

_____

_____

29. If a reliable pt is extricated using a standard backboard (chosen by the crew on scene) for the sole purpose of conveyance (to move a pt from one place to another only), then the pt MUST remain on the board for transport.

TRUE **FALSE**

30. In accordance with system memo #349, what is the sole purpose of keeping **UN**reliable pts or those with a strong suspicion of injury on the backboard? (p. 8 handout)

_____

_____

31. Referring to the NAEMSP resource document, the statement is made that judicious use of backboards should occur based on literature review. Each decision regarding spine motion restriction (SMR) requires a risk/benefit analysis; therefore appropriate patients to be immobilized with a backboard may include those with:

_____

_____

_____

_____

_____

32. Additionally, the patients for which immobilization on a backboard is NOT necessary include those with:

(1) _____

(2) _____

(3) _____

(4) _____

(5) _____

33. In circumstances where the risk of unstable injury is low, the risks of rigid backboard may outweigh its benefit, thus warranting transport using a cervical collar and the mattress gurney alone as spinal precautions.

TRUE **FALSE**

34. How is the ambulance stretcher re-defined when discussing concern for spinal precautions during pt transport?

_____

35. When putting the science into practice, how did the author redefine "spinal immobilization" and what is the difference in using a backboard as a conveyance device vs. an "immobilization" device? (p. 16 handout)

_____

_____

_____

36. In 2001, Vickery identified that, given the risks associated with prolonged backboard use, how should hospitals change their current practice? (p. 17 handout)

_____

_____

_____

Scenario: 60 F pt is found by caregiver in the 2nd floor bedroom stating her walker got caught on a throw rug causing her to trip and fall. She fell against the 4 poster bed, causing a ½" lac to her L forehead with a moderate amount of bleeding noted on her face and clothing. She is awake and alert, oriented x 3, GCS=15, able to move all extremities with no distracting injuries and obeys commands. The pt denies neck or back pain, no abnormalities noted to palpation. Motor and sensory function remains intact.

37. What type of mechanism is sustained?

Positive **Uncertain** **Negative**

38. What type of spine motion restriction is required?

_____

39. If the exact same scenario occurred, but the pt was 88years old, what would be the type of mechanism?

Positive **Uncertain** **Negative**

40. Please describe what type of spine motion restriction is required and how would it be accomplished.)

_____

_____

Please return to your system EMS hospital nurse educator upon completion!