CHAPTER 30

Musculoskeletal Injuries

HANDOUT 30-2: Evaluating Content Mastery  Student’s Name

EVALUATION

CHAPTER 30 QUIZ

Write the letter of the best answer in the space provided.

______ 1. All the following are part of the musculoskeletal system EXCEPT:
   A. bones.  C. cartilage.
   B. joints.  D. skin.

______ 2. The bones found in the arm and thigh are examples of:
   A. long bones.  C. flat bones.
   B. short bones.  D. irregular bones.

______ 3. The major short bones of the body are found in the:
   A. neck.  C. hands and feet.
   B. shoulder blades.  D. ribs.

______ 4. The strong, white, fibrous membrane that covers bones and through which blood vessels and nerves pass is called the:
   A. calcium.  C. periosteum.

______ 5. Tissues or fibers that cause movement of the body parts or organs are called:
A. periosteum.  
B. muscles.  
C. cartilage.  
D. tendons.

6. The mechanism that causes the crushed tissues and fractures found in a patient struck by an auto is:
A. direct force.  
B. indirect force.  
C. twisting force.  
D. rotational force.

7. Bones broken in several places are classified as:
A. angulated.  
B. comminuted.  
C. greenstick.  
D. dislocated.

8. An injury to a joint in which the bone ends become separated from each other is called a(n):
A. dislocation.  
B. angulation.  
C. sprain.  
D. fracture.

9. The splints that are most commonly used to immobilize joint injuries in the position found are:
A. rigid splints.  
B. vacuum splints.  
C. formable splints.  
D. traction splints.

10. After taking Standard Precautions, exposing the area, and controlling any external bleeding, the next step in immobilizing a long bone fracture is:
A. assessing distal PMS.  
B. applying manual stabilization.  
C. measuring the splint.  
D. applying the splint.

11. If a patient’s injured leg appears shorter than the other, an EMT should
suspect:

A. patella injury.  
B. ankle dislocation.  
C. fibula injury.  
D. hip fracture.

12. All the following are care steps in treating an ankle or foot injury EXCEPT:

A. applying manual traction.  
B. assessing distal PMS function.  
C. placing a pillow under the ankle.  
D. caring for shock.

13. The splint best suited for stabilization of a dislocated shoulder is a(n):

A. air-inflatable splint.  
B. sling and swath.  
C. traction splint.  
D. rigid splint.

14. The splint best suited for easing pain of muscle spasm associated with fractures of the femur is a(n):

A. air-inflatable splint.  
B. traction splint.  
C. vacuum splint.  
D. PASG.

15. Muscle injuries resulting from overstretching or overexertion of the muscle are called:

A. sprains.  
B. strains.  
C. dislocations.  
D. sublocations.
IN THE FIELD

*Read the following real-life situation. Then answer the questions that follow.*

Your unit responds to a 911 call by a mother who reports that her 11-year-old son “has fallen from his tree house.” When you arrive on the scene, the mother takes you into the backyard where you see the boy grimacing in pain. He is holding his right leg. “It hurts all the way down to my toes,” says the boy.

You introduce yourself and find out that the boy’s name is Timmy. His friend Richie breaks into the conversation. “We were carrying stuff into the tree house, and Timmy fell off the ladder.”

You see wooden rungs nailed to the tree trunk and ask Richie to indicate where Timmy slipped. Richie indicates a rung about eight feet off the ground. You ask Timmy if he remembers how he landed. “I think I hit my feet first,” he says. “It hurt so much that I couldn’t stand.”

1. What mechanism caused Timmy’s injuries?
2. What bones or joints do you suspect have been injured?
3. What type of splint will you use to immobilize Timmy? Why?
4. What factors must you take into account because of Timmy’s age?
CHAPTER 30 REVIEW

Write the word or words that best complete each sentence in the space provided.

1. The ___________________ ___________________ is composed of all the bones, joints, and muscles of the body.

2. As components of the skeleton, bones provide the body’s ___________________.

3. _________________ are the places where bones articulate, and are a critical element in the body’s ability to move.

4. The most common type of bone injury is a break, or _______________.

5. Both the swelling and clotting associated with broken bones is due to the destruction of blood vessels in the _______________.

6. ________________ are bands of connective tissue that bind the muscles to the bones.

7. The three types of mechanisms that cause musculoskeletal injuries include _______________ force, _______________ force, and _______________ force.

8. The _______________ _______________ applies constant pull along the length of the femur to stabilize fractures and reduce muscle spasms.

9. The three classifications of bone fractures are ___________________, ___________________, and ___________________.

10. Proper _______________ and prehospital care of musculoskeletal injuries help prevent closed injuries from becoming _______________ injuries.

11. Blood at the meatus of the penis (opening) is a sign of _______________ trauma.

12. The memory aid CSM stands for _______________, ___________________.
13. Dramatic-looking or painful extremity injuries can sometimes distract an EMT from looking for other __________________ - __________________ conditions.

14. For any splint to be effective, it must immobilize ___________________ 
___________________ and ___________________.

15. The object of realignment of deformed extremities is to assist in restoring effective ___________________.

16. A traction splint is contraindicated if there is a(n) ____________________, 
___________________, or ____________________ injury.

17. A patient with a hip fracture should be managed for ___________________ and receive oxygen at high concentration.

18. Studies of mechanisms of injury indicate that infants and children with fractured femurs often have injury to ___________________ ____________________.

19. ___________________ and ___________________ are the most common musculoskeletal injuries to the ankle and the foot.

20. A triangular bandage used to support the shoulder and arm is called a(n) ___________________.

MUSCULOSKELETAL INJURIES LISTING

Complete the following lists.

1. List the six components of the musculoskeletal system.

2. List four types of musculoskeletal injuries.

3. List three types of mechanisms that cause musculoskeletal injury.

4. List at least six signs or symptoms of musculoskeletal injuries.
IDENTIFYING MAJOR BONES

Write the letter indicating where the bone is located in the space provided next to the name of the bone.

_____ 1. Pelvis
_____ 2. Femur
_____ 3. Lumbar spine
_____ 4. Ulna
_____ 5. Clavicle
_____ 6. Fibula
_____ 7. Xiphoid process
_____ 8. Elbow
_____ 9. Radius
_____10. Tibia
_____11. Cervical spine
_____12. Humerus