Chapter # 31: Orthopaedic Injuries

1. The musculoskeletal system refers to the:
   A) bones and voluntary muscles of the body.
   B) nervous system's control over the muscles.
   C) connective tissue that supports the skeleton.
   D) involuntary muscles of the nervous system.

2. Skeletal muscle is attached to the bone by tough, ropelike, fibrous structures called:
   A) fascia.
   B) tendons.
   C) cartilage.
   D) ligaments.

3. A fracture is MOST accurately defined as a(n):
   A) total loss of function in a bone.
   B) break in the continuity of the bone.
   C) disruption in the midshaft of a bone.
   D) abnormality in the structure of a bone.

4. With regard to musculoskeletal injuries, the zone of injury is defined as the:
   A) area of obvious deformity over the site of impact.
   B) exact part of the bone or joint that was disrupted.
   C) area of soft-tissue damage surrounding the injury.
   D) part of the body that sustained secondary injury.

5. Which of the following musculoskeletal injuries would MOST likely result in deformity?
   A) Severe strain
   B) Moderate sprain
   C) Hairline fracture
   D) Displaced fracture

6. An open fracture is MOST accurately defined as a fracture in which:
   A) bone ends protrude through the skin.
   B) a large laceration overlies the fracture.
   C) a bullet shatters the underlying bone.
   D) the overlying skin is no longer intact.

7. Crepitus and false motion are:
   A) indicators of a severe sprain.
   B) only seen with open fractures.
   C) positive indicators of a fracture.
   D) most common with dislocations.

8. Which of the following musculoskeletal injuries would pose the greatest threat to a patient's life?
   A) An amputated extremity
   B) Bilateral femur fractures
   C) Nondisplaced long bone fractures
   D) Pelvic fracture with hypotension

9. A 22-year-old female was ejected from her car after striking a tree head-on. As you approach her, you note obvious closed deformities to both of her femurs. She is not moving and does not appear to be conscious. You should:
   A) apply manual stabilization to both of her femurs.
   B) administer oxygen and perform a rapid assessment.
   C) assess for a carotid pulse and assist her ventilations.
   D) stabilize her head and perform a primary assessment.

10. A 54-year-old male accidentally shot himself in the leg while cleaning his gun. Your assessment reveals a small entrance wound to the medial aspect of his right leg. The exit wound is on the opposite side of the leg and is actively bleeding. The patient complains of numbness and tingling in his right foot. You should:
    A) assess distal pulses as well as sensory and motor functions.
    B) manually stabilize the leg above and below the site of injury.
    C) gently manipulate the injured leg until the numbness dissipates.
    D) control the bleeding and cover the wound with a sterile dressing.

11. In general, musculoskeletal injuries should be splinted before moving the patient unless:
    A) the patient is in severe pain.
    B) the patient is clinically unstable.
    C) deformity and swelling are present.
    D) transport time is less than 15 minutes.

12. In which of the following situations should the EMT splint an injured limb in the position of deformity?
    A) When distal circulation and neurological functions are absent
    B) If transport time to the hospital is greater than 20 to 30 minutes
    C) If resistance is encountered or the patient experiences severe pain
    D) If a traction splint will be used to immobilize the injured extremity

13. During your secondary assessment of a 30-year-old male who fell 25 feet, you note crepitus when palpating his pelvis. Your partner advises you that the patient's blood pressure is 80/50 mm Hg and his heart rate is 120 beats/min and weak. After completing your assessment, you should:
    A) defer spinal immobilization and transport to a trauma center.
    B) perform a focused physical exam with emphasis on the pelvis.
    C) stabilize the pelvis with a pelvic binder and protect the spine.
    D) log roll the patient onto a long backboard and transport at once.

14. The MOST significant hazard associated with splinting is:
    A) aggravation of the injury or worsened pain.
    B) reduction in circulation distal to the injury site.
    C) compression of nerves, tissues, and vasculature.
    D) delaying transport of a critically injured patient.

15. When caring for a patient with a possible fracture of the scapula, the EMT should:
    A) carefully assess the patient for breathing problems.
    B) apply rigid board splints across the chest and back.
    C) assume that minimal force was applied to the back.
    D) recognize that scapular fractures are life threatening.

16. A supracondylar or intercondylar fracture is also known as a fracture of the:
    A) radial head.
    B) distal humerus.
    C) proximal radius.
    D) olecranon process.

17. During your assessment of a 29-year-old female with significant deformity to her left elbow, you are unable to palpate a radial pulse. Your transport time to the hospital is approximately 40 minutes. You should:
    A) splint the elbow in the position of deformity and transport immediately.
    B) apply gentle manual traction in line with the limb and reassess for a pulse.
    C) carefully straighten the injured arm and secure it with padded board splints.
    D) make two or three attempts to restore distal circulation by manipulating the elbow.

18. A “hip” fracture is actually a fracture of the:
    A) pelvic girdle.
    B) femoral shaft.
    C) pubic symphysis.
    D) proximal femur.

19. Which of the following statements regarding compartment syndrome is correct?
    A) Compartment syndrome typically develops within 6 to 12 hours after an injury.
    B) Compartment syndrome occurs because of increased pressure within the bone cavity.
    C) In most cases, compartment syndrome develops within a few minutes after an injury.
    D) Most cases of compartment syndrome occur following a severe fracture of the pelvis.

20. A 17-year-old female dislocated her patella while playing soccer. Her knee is flexed and she complains of severe pain. You should:
    A) make one attempt to return the patella to its normal position.
    B) gently straighten her knee and apply a padded board splint.
    C) flex her knee slightly more and assess for distal circulation.
    D) keep her knee flexed and secure it with padded board splints.