1. **Which of the following is a true statement regarding the skin's status in the case of a closed chest injury?**
   a. Internal contusions and lacerations cannot occur.
   b. The skin may be penetrated and occluded.
   c. The skin is penetrated.
   d. The skin is not penetrated.

2. **Which of the following is a strategy to maintain an occlusive dressing to bloody or diaphoretic skin?**
   a. Do not use occlusive dressings in this case.
   b. Manually maintain pressure.
   c. Do not use adhesive tape.
   d. Wrap the dressing circumferentially with gauze.

3. **Some drawbacks to using sterile aluminum foil as an occlusive dressing include:**
   a. sterility cannot be ensured unless the materials were autoclaved.
   b. a flutter valve is difficult to create.
   c. foil cannot create an airtight seal.
   d. skin lacerations may occur from the sharp edges.

4. **Which of the following is required in the management of all open soft-tissue injuries?**
   a. Provision of high-concentration oxygen to the patient
   b. The use of Standard Precautions by the EMT
   c. Cervical spine precautions
   d. Application of a disinfectant solution during clean-up

5. **In addition to lacerations, blunt trauma resulting in a closed chest injury creates the potential for which of the following internal injuries?**
   a. Abrasion
   b. Contusion
   c. Evisceration
   d. Avulsion

6. **You are dispatched to a 42-year-old male who was shot in the abdomen and thrown from a vehicle. The patient is critical and a high-category trauma; however, due to the mechanism of illness, it is necessary to backboard the patient prior to transport. What is an important assessment before securing the patient?**
   a. Verifying trauma center ER bed availability
   b. Examining the patient for entrance and exit wounds
   c. Searching for presence of diaphoresis, tachycardia, and hypotension
   d. Performing a distal neurological assessment

7. **Which of the following is a vascular organ in the abdomen that can produce blood loss quickly enough to result in life-threatening hemorrhage following high mechanism of injury blunt trauma?**
   a. Intestines
   b. Liver
   c. Pancreas
   d. Kidneys
8. You're an off-duty EMT who encounters a patient sitting behind the wheel of a vehicle that ran off the road along an isolated county road. It appears the patient was unrestrained, or not wearing a seat belt, and struck the steering wheel with his chest. On assessment, you notice a paradoxical motion to the patient's chest on inspiration and expiration. When you radio for dispatch of an ambulance, which of the following pieces of information would you be sure to include?
   a. The patient may have an abdominal evisceration.
   b. The patient is showing signs of abdominal bleeding.
   c. The patient is showing signs of an open chest injury.
   d. The patient may have a flail chest.

9. Which of the following BEST describes an evisceration?
   a. An open wound of the abdomen from which organs protrude
   b. A flap of skin that is partially or completely torn away from the underlying tissue
   c. An accumulation of blood beneath the skin, resulting in swelling
   d. The epidermis that is scraped away by a rough surface

10. Bleeding from open abdominal injuries should initially be controlled with which one of the following techniques?
    a. Packing the wound with rolled gauze
    b. Applying an occlusive dressing
    c. Applying direct pressure to the wound
    d. Applying an ice pack or chemical cold pack

11. Which of the following is NOT an open tissue injury?
    a. Contusion
    b. Evisceration
    c. Avulsion
    d. Abrasion

12. A 36-year-old male was accidentally shot with a nail gun into the chest. You see the nail, which protrudes about 2 to 3 centimeters from the thorax, when you visualize the injury site. Under which of the following circumstances should you remove the nail from the injury site?
    a. Bleeding from the patient's wound is minimal.
    b. The patient develops a tension pneumothorax.
    c. The patient begins to complain of shortness of breath.
    d. None of the above

13. Which of the following injuries does NOT produce distended neck veins?
    a. Traumatic asphyxia
    b. Tension pneumothorax
    c. Cardiac tamponade
    d. All of the answer choices may cause distended neck veins.

14. Which of the following injuries requires the use of an occlusive dressing?
    a. An open wound to the chest
    b. An open wound to the neck
    c. An open wound to the abdomen from which a loop of intestine is protruding
    d. All of the above

15. Which of the following is an unreliable sign for determining the presence of a tension pneumothorax?
    a. Distended neck veins
    b. Signs and symptoms of shock
    c. Shortness of breath
    d. Trachea that shifts to the side opposite the injury
16. **Which of the following describes the proper application of an occlusive dressing for an open chest wound?**
   - a. Trim the dressing so that it is the exact size of the wound.
   - b. Use a porous material such as a 4” by 4” gauze pad.
   - c. Tape the dressing securely on three sides.
   - d. None of the above

17. **For which of the following wounds should the EMT apply an absorbent dressing moistened with sterile saline and then cover it with an occlusive dressing?**
   - a. A gunshot wound to the abdomen from which a loop of intestine is protruding
   - b. A stab wound to the chest
   - c. A laceration to the neck
   - d. The stump of an amputated extremity

18. **The pathophysiology of ________ is one in which the pericardial sac fills with blood to the point where the chambers of the heart no longer fill adequately, usually secondary to trauma.**
   - a. pericardial effusion
   - b. hemopneumothorax
   - c. cardiac tamponade
   - d. commotio cordis

19. **Which of the following traumatic chest injuries may result in massive, often fatal internal hemorrhage?**
   - a. Hemopneumothorax
   - b. Hemothorax
   - c. Aortic dissection
   - d. Cardiac tamponade

20. **You are on an EMS standby for a boxing tournament. During one of the matches, one of the female boxers delivers a forcible uppercut to the chest of her opponent, who falls to the ground. The match is declared over on the basis of a TKO. However, the opponent fails to arise following a 1–2 minute interval. EMS is summoned to the ring. You find the patient pulseless and breathing agonal gasps. You suspect which of the following traumatic conditions?**
   - a. Cardiac tamponade
   - b. Aortic dissection
   - c. Tension pneumothorax
   - d. Commotio cordis

21. **While palpating the radial pulses of a patient who was involved in a motor vehicle crash, you notice a difference in the strength of the pulses bilaterally. This is a finding that you suspect may be associated with:**
   - a. aortic dissection.
   - b. tension pneumothorax.
   - c. commotio cordis.
   - d. flail chest.

22. **Common signs and symptoms following an injury to a hollow abdominal organ include:**
   - a. increasing intrathoracic pressures.
   - b. irritation and peritonitis.
   - c. massive hemorrhage.
   - d. absence of unilateral pulses.
23. **Which of the following patients is at greatest risk of respiratory failure and should be carefully monitored for ventilatory status throughout treatment and transport?**
   a. Tension pneumothorax
   b. Flail chest
   c. Abdominal evisceration
   d. Hemopneumothorax

24. **Which of the following types of bandages should NOT be used by the EMT providing wound care?**
   a. Self-adherent roller gauze
   b. Tourniquet
   c. A triangular bandage
   d. Adhesive tape

25. **Which of the following is a desirable characteristic of dressings used in the prehospital management of most open wounds?**
   a. Nonabsorbent
   b. Sterile
   c. Occlusive
   d. Adherent

26. **You are caring for a 27-year-old male who has a puncture wound to the right upper chest. The patient was stabbed with a serrated steak knife by his ex-girlfriend. You have placed an occlusive dressing to the site and began emergent transport to the closest trauma center. However, while en route the patient begins to complain of increasing shortness of breath. You notice a decrease in ventilatory volume and an increase in thoracic diameter. Which of the following options would be the best step to perform next?**
   a. Free a corner or edge of the dressing to release pressure buildup.
   b. Begin providing BVM-assisted ventilations to the patient.
   c. Call dispatch for an ALS intercept en route to the hospital.
   d. Begin providing CPR to the patient.

27. **Your patient is a 55-year-old male who was found in the parking lot behind a tavern. He states that he was assaulted and robbed by three individuals. He is complaining of being "hit in the face and kicked and punched in his ribs and stomach." Your examination reveals contusions and swelling around both eyes, bleeding from the nose, a laceration of his upper lip, and multiple contusions of the chest, abdomen, and flanks. Which of the following should cause the greatest concern regarding the prehospital care of this patient?**
   a. The presence of any defensive wounds the patient may have sustained
   b. Getting a description of the assailants
   c. The possibility of a pneumothorax
   d. Reducing the swelling around his eyes by applying a cold pack

28. **Which of the following is NOT appropriate in caring for a patient with closed soft-tissue injuries and a significant mechanism of injury?**
   a. Treat for shock if you think there are internal injuries even if the patient's vital signs are normal.
   b. Anticipate vomiting.
   c. Splint any swollen, deformed extremities.
   d. All of the answer choices are appropriate.

29. **Which of the following is true concerning lacerations?**
   a. They may be caused by blunt trauma.
   b. They may be caused by penetrating trauma.
   c. They may indicate deeper underlying tissue damage.
   d. All of the above
30. **Which of the following is of concern with a puncture wound?**
   a. The object that remains impaled in the body
   b. The strong possibility of contamination
   c. Hidden internal bleeding with minimal external bleeding
   d. All of the above

31. **Which of the following is an accurate definition of a flail chest?**
   a. A lung that has been punctured by a fractured rib, resulting in a buildup of air
   b. A section of the chest wall that is unstable, leading to breathing problems
   c. The fracture of one rib in two or more consecutive places
   d. The fracture of at least four ribs in two or more places

32. **What is the underlying cause of bluish or reddish facial discoloration following a traumatic asphyxiation?**
   a. High pressure on the chest leads to blood being forced from the right atrium into the face and neck.
   b. The patient has become hypoxic due to a chest injury and the finding suggests central cyanosis.
   c. The physiological strain of the body results in a flushed appearance and increased risk of a hypertensive event.
   d. Bluish or reddish facial discoloration is not associated with traumatic asphyxiation; a pale discoloration is usually present.

33. **On assessment of the midsection of a 32-year-old male who was struck by a car, you find an abdominal evisceration with several loops of his large intestine exposed. The abdomen appears to have a clean-cut laceration and the bleeding is controlled. Which of the following is the BEST approach toward managing the exposed intestines?**
   a. Moisten a sterile dressing with saline solution and cover the abdominal contents.
   b. Gently replace the intestines after moistening with sterile saline solution.
   c. Leave the abdominal contents in the place in which they were found and transport immediately.
   d. Cover the abdomen with an occlusive dressing of aluminum foil.

34. **Your patient is a 21-year-old male who has a gunshot wound to the chest. Which of the following is the highest priority in managing this patient?**
   a. Placing the patient in the shock position
   b. Performing a rapid trauma assessment
   c. Placing a pressure dressing over the wound to control bleeding
   d. Placing an occlusive dressing over the wound

35. **Which of the following BEST describes the benefit of a three-sided occlusive dressing over a four-sided occlusive dressing for an open chest wound?**
   a. It eliminates the need to continue monitoring the patient's respiratory status.
   b. It prevents the development of a hemothorax by allowing blood to escape.
   c. It allows easy access for re-examination of the wound en route to the hospital.
   d. It reduces the chances of developing a tension pneumothorax.

36. **The mechanism of injury in which a patient's chest has struck an immovable object, such as a steering wheel, may most accurately be described as a:**
   a. blunt trauma injury.
   b. compression injury.
   c. penetrating injury.
   d. coup contrecoup injury.
37. The chest cavity can hold up to _______ liter(s) in an adult, leading to the possibility of massive internal hemorrhage without any external blood loss.
   a. 3
   b. 5
   c. 0.5
   d. 1

38. You are stabilizing a patient who has just been stabbed in the chest to the right of the mediastinum. After placing the patient on supplemental oxygen, his shortness of breath resolves. You also cover the wound with an occlusive dressing. The patient is asymptomatic at the time you’re making the decision to transport. Which of the following BEST encapsulates the correct strategy for transport?
   a. The patient does not necessarily need transport, so allow him to refuse if he wants.
   b. Transport the patient emergently because of the high index of suspicion for a serious injury.
   c. Begin transport non-emergently and upgrade if the patient's condition deteriorates.
   d. Transport the patient non-emergently because he's complaint free.

39. What is the correct terminology for a wound in which a vacuum has been created within the chest, drawing air into the thorax with each breath?
   a. A sucking chest wound
   b. A closed tension pneumothorax
   c. An open chest wound
   d. A gurgling chest wound

40. A patient with jugular vein distention is most likely suffering from which of the following injuries?
   a. Pneumothorax
   b. Hemothorax
   c. Hemopneumothorax
   d. Tension pneumothorax

41. Your patient was working on a car when it fell off the jack and trapped him between the tire and ground. His face is very blue and his eyes are bloodshot. Which of the following has the patient most likely suffered?
   a. Hemothorax
   b. Traumatic asphyxia
   c. Pneumothorax
   d. Flail chest

42. You are treating a patient with paradoxical motion on the left side of the chest. He is breathing shallow at a rate of 4 breaths per minute. You should:
   a. begin positive pressure ventilation.
   b. apply a bulky dressing to the chest.
   c. administer 15 lpm oxygen via mask.
   d. roll the patient onto his left side.

43. A teenage male has fallen onto a railing while skateboarding. He complains of right-sided chest pain and moderate dyspnea. Exposure of the chest reveals a section of his ribs that is moving opposite of the rest of the ribs. You should:
   a. roll the patient over onto his right side.
   b. begin positive pressure ventilation.
   c. cover the wound with an occlusive dressing.
   d. apply a bulky dressing over the section.
44. **You find a middle-aged male is sitting against a wall in obvious distress. The patient appears to be extremely short of breath and has an open wound to his chest that is making a sucking sound. You should:**
   a. place the patient on high-concentration oxygen.
   b. cover the wound with an occlusive dressing.
   c. place a trauma dressing over the wound.
   d. place your gloved hand over the wound.

45. **You have covered an open chest wound with your gloved hand and the patient's breathing has improved. In order to free your hand to provide further care, you should:**
   a. cover the wound with a sterile dressing.
   b. cover the wound with a sterile dressing. cover the wound with an occlusive dressing.
   c. apply a bulky dressing over the wound.
   d. remove your hand to see if the wound has closed.

46. **Your patient is a 17-year-old male baseball player found pulseless and apneic after being struck in the chest by a baseball 6 minutes ago. He is surrounded by other players and staff but no one is providing care. You should:**
   a. elevate the patient's legs.
   b. attach the AED and analyze.
   c. begin chest compressions.
   d. place him on a backboard.

47. **You are palpating the abdomen of a motor vehicle collision patient when you feel a pulsing mass. You should:**
   a. defer further abdominal palpation.
   b. ask your partner to verify your findings.
   c. bind the abdomen with an elastic bandage.
   d. apply cold packs to the abdomen.

48. **Your patient has an open abdominal wound with intestines protruding. You should:**
   a. leave them alone and transport rapidly.
   b. attempt to place the organs back into the abdomen.
   c. cover the entire abdomen with a blanket.
   d. cover the organs with moist sterile dressings.
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1. d. The skin is not penetrated.
2. b. Manually maintain pressure.
3. d. Skin lacerations may occur from the sharp edges.
4. b. The use of Standard Precautions by the EMT
5. b. Contusion
6. b. Examining the patient for entrance and exit wounds
7. b. Liver
8. d. The patient may have a flail chest.
9. a. An open wound of the abdomen from which organs protrude
10. c. Applying direct pressure to the wound
11. a. Contusion
12. d. None of the above
13. d. All of the answer choices may cause distended neck veins.
14. d. All of the above
15. d. Trachea that shifts to the side opposite the injury
16. c. Tape the dressing securely on three sides.
17. a. A gunshot wound to the abdomen from which a loop of intestine is protruding
18. c. Cardiac tamponade
19. c. Aortic dissection
20. d. Commotio cordis
22. b. Irritation and peritonitis.
23. a. Tension pneumothorax
24. b. Tourniquet
25. b. Sterile
26. a. Free a corner or edge of the dressing to release pressure buildup.
27. c. The possibility of a pneumothorax
28. d. All of the answer choices are appropriate.
29. d. All of the above
30. d. All of the above
31. b. A section of the chest wall that is unstable, leading to breathing problems
32. a. High pressure on the chest leads to blood being forced from the right atrium into the face and neck.
33. a. Moisten a sterile dressing with saline solution and cover the abdominal contents.
34. d. Placing an occlusive dressing over the wound
35. d. It reduces the chances of developing a tension pneumothorax.
36. b. Compression injury.
37. a. 3
38. b. Transport the patient emergently because of the high index of suspicion for a serious injury.
39. a. A sucking chest wound
40. d. Tension pneumothorax
41. b. Traumatic asphyxia
42. a. Begin positive pressure ventilation.
43. d. Apply a bulky dressing over the section.
44. d. Place your gloved hand over the wound.
45. b. Cover the wound with a sterile dressing. Cover the wound with an occlusive dressing.
46. c. Begin chest compressions.
47. a. Defer further abdominal palpation.
48. d. Cover the organs with moist sterile dressings.