ATLS Practice Test 7

1. A patient with significant facial trauma is deteriorating quickly. Which is the most appropriate immediate action for securing the airway?
   a. Perform rapid sequence intubation (RSI) with in-line cervical spine stabilization
   b. Attempt blind nasal intubation
   c. Wait for imaging before intubating
   d. Intubate only when SpO_2 drops below 90%
   e. Use a supraglottic airway and defer definitive airway

2. A patient presents after a motor vehicle crash with decreased vision in the left eye. Exam shows a teardrop-shaped pupil pointing toward a scleral laceration, subconjunctival hemorrhage 360°, and extrusion of intraocular contents. What is the best immediate management?
   a. apply a pressure dressing and send to CT scan
   b. shield the eye and give broad-spectrum IV antibiotics
   c. irrigate with copious saline
   d. measure intraocular pressure
   e. dilate the pupil for fundus exam

3. Which scenario demonstrates failure to apply ATLS principles?
   a. securing the airway before imaging
   b. placing a chest tube before CT scan in tension pneumothorax
   c. deferring airway management until history is complete
   d. initiating fluids for shock during primary survey
   e. immobilizing spine before transfer

4. Which is the appropriate action during the Disability (D) step of primary survey?
   a. full ophthalmic exam
   b. head CT
   c. Full spine films
   d. GCS assessment and pupil check
   e. psychiatric evaluation

5. Where should a chest tube be inserted for hemothorax or pneumothorax?
   a. 2nd intercostal space, midclavicular line
   b. 5th intercostal space, midaxillary line
   c. 6th intercostal space, parasternal line
   d. 4th intercostal space, midclavicular line
   e. 8th intercostal space, posterior axillary line

6. Which of the following findings in a burn patient mandates early intubation?
   a. singed nasal hairs only
   b. hoarseness and stridor
   c. mild facial burns without airway symptoms
   d. blistering of extremities
   e. carbonaceous sputum without distress

7. A victim of an explosion presents with dyspnea, hemoptysis, and decreased breath sounds on the right. What is the most likely injury?
   a. primary blast lung injury (pulmonary barotrauma)
   b. secondary injury from shrapnel
   c. tertiary injury from body displacement
   d. quaternary injury from burns
   e. rib fractures

8. In trauma patients, hypothermia contributes to the lethal triad. What is the primary effect of hypothermia?
   a. worsens myocardial contractility
   b. causes hypercoagulability
   c. impairs coagulation and platelet function
   d. increases the oxygen demand of tissues
   e. causes metabolic alkalosis

9. Following a pelvic fracture, which genitourinary injury is most likely?
   a. pre-prostatic urethra
   b. prostatic urethra
   c. membranous urethra
   d. Spongy (penile) urethra
   e. bladder

10. A hemodynamically unstable adult with penetrating abdominal trauma arrives in the ED. There is no obvious exsanguinating hemorrhage, and airway and breathing are controlled. FAST reveals free fluid. According to ATLS principles, what is the most appropriate next step in management?
    a. CT scan of the abdomen
    b. diagnostic peritoneal lavage
    c. laparotomy
    d. observation with serial clinical exams
    e. angiographic embolization

11. Which is the best indicator of fetal well-being in a pregnant trauma patient?
    a. maternal blood pressure
    b. maternal heart rate
    c. continuous electronic fetal monitoring (cardiotocography) after maternal stabilization
    d. FAST exam
    e. maternal oxygen saturation

12. In a trauma patient with left lower chest bowel sounds and reduced breath sounds on that side after a motor vehicle collision, what injury should be highly suspected?
    a. pulmonary contusion
    b. massive hemothorax
    c. tension pneumothorax
    d. diaphragmatic rupture
    e. flail chest

13. Which of the following signs is the most specific for intra-abdominal injury requiring laparotomy after blunt trauma?
    a. hypotension
    b. abdominal distension
    c. seat belt sign
    d. peritoneal signs
    e. positive FAST

14. A 33-year-old female is brought in after a fall from height. She is hemodynamically stable, has pelvic fractures, and gross hematuria. FAST is negative. What is the best next investigation?
    a. CT cystogram
    b. retrograde urethrogram
    c. contrast CT of the abdomen
    d. intravenous pyelogram
    e. diagnostic peritoneal lavage

15. A 50-year-old male sustains a stab wound to the left chest at the 7th intercostal space, anterior axillary line. He is stable but has abdominal tenderness. Which structure is most likely injured?
    a. spleen
    b. liver
    c. lung
    d. diaphragm
    e. kidney

16. Which of the following injuries most commonly leads to delayed hemorrhage after blunt renal trauma?
    a. renal artery thrombosis
    b. segmental renal infarct
    c. renal vein laceration
    d. renal pseudoaneurysm
    e. ureteropelvic junction disruption

17. A trauma patient presents after a high-speed MVC. Chest X-ray reveals widened mediastinum. The patient is hemodynamically stable. What is the most appropriate next diagnostic step?
    a. Repeat upright chest X-ray
    b. Transthoracic echocardiography
    c. CT angiography of the chest
    d. Diagnostic peritoneal lavage
    e. Immediate thoracotomy

18. A 28-year-old male is brought in after a motorcycle crash. He is tachycardic, with BP 90/60 mmHg. FAST is positive in Morrison's pouch. CT scan shows grade IV liver laceration with contrast blush. He becomes hypotensive during resuscitation. What is the most appropriate next step?
    a. transfer to interventional radiology for embolization
    b. laparotomy
    c. non-operative management in ICU
    d. administer recombinant factor VIIa
    e. tranexamic acid IV

19. A patient with blunt trauma has persistent hypotension despite transfusions. FAST is negative, CXR is clear, and no long bone fractures are found. There is increasing pelvic instability. A pelvic binder is applied. Which is the next most definitive step in management?
    a. repeat FAST
    b. CT pelvis with contrast
    c. exploratory laparotomy
    d. preperitoneal pelvic packing
    e. angioembolization

20. A 43-year-old female is stabbed in the lower anterior chest (8th intercostal space, midclavicular line). She is stable. FAST is equivocal. Which diagnostic test is most sensitive for evaluating diaphragmatic injury?
    a. laparoscopy
    b. diagnostic peritoneal lavage
    c. upright chest X-ray
    d. CT scan with contrast
    e. ultrasound with sniff test

21. A trauma patient with known pelvic fracture undergoes Foley catheter placement. Hours later, urine becomes bloody and abdominal distension develops. CT cystogram reveals contrast extravasation into the peritoneal cavity. What is the correct management?
    a. Foley catheter and observation
    b. bladder irrigation and observation
    c. surgical repair via transabdominal approach
    d. suprapubic catheter placement
    e. transurethral repair

22. A 60-year-old man with blunt chest trauma becomes hypotensive. FAST is negative. ECG shows electrical alternans. Neck veins are distended. What is the next best step?
    a. IV fluids
    b. chest tube placement
    c. emergent thoracotomy
    d. pericardiocentesis
    e. CT chest

23. A hemodynamically stable patient has microscopic hematuria after blunt abdominal trauma. CT scan reveals a non-expanding retroperitoneal hematoma and right renal laceration without contrast extravasation. What is the next step?
    a. immediate nephrectomy
    b. surgical exploration
    c. non-operative management
    d. embolization of renal artery
    e. repeat imaging in 6 hours

24. A 27-year-old with TBI presents to a rural Level III trauma center. The hospital provides initial stabilization but lacks neurosurgical capability. According to ATLS trauma system principles, what is the most appropriate next step?
    a. Continue resuscitation and definitive care locally.
    b. Immediate transfer to the nearest Level I or II trauma center.
    c. Admit for observation with daily telemedicine review.
    d. Transfer only if patient deteriorates neurologically.
    e. Discharge once stable for outpatient follow-up.

25. Over-triage in an MCI would result in the greatest risk of which of the following?
    a. Increased mortality among minor-injury patients
    b. Delay in treating the most critically injured patients
    c. Failure to identify patients with hidden injuries
    d. Ethical violations in resource allocation
    e. Excessive use of expectant (black) designation

26. A 33-year-old man presents after multiple gunshot wounds. He is hemodynamically stable but becomes agitated when questioned by police at the bedside. What is the most appropriate trauma-informed action?
    a. Allow police to continue questioning during resuscitation.
    b. Tell the patient he must cooperate or face legal consequences.
    c. Restrain the patient to allow questioning to proceed.
    d. Ask police to step out until patient is stable and privacy ensured.
    e. Provide only written information to the police without patient consent.

27. A 42-year-old man is shot in the left lower chest, just below the nipple. He is stable on arrival. FAST shows free fluid in the upper abdomen. What is the most important next step?
    a. diagnostic peritoneal lavage
    b. chest tube insertion and observation
    c. CT scan of the chest and abdomen with IV contrast
    d. exploratory laparotomy
    e. Observation with serial physical exams

28. A 54-year-old woman with massive burns is unlikely to survive. The family asks: *"Doctor, is she going to be okay?"* Which is the best response?
    a. "It's too early to say; let's wait and see."
    b. "She is very sick, and I am worried she may not survive."
    c. "We will continue every aggressive treatment no matter what."
    d. "She will be fine; we just need time."
    e. "You should prepare for the worst."

29. A 24-year-old soldier is brought from the field with a knife still lodged in his left thigh. He is hemodynamically stable with palpable distal pulses. What is the most appropriate management in the ED?
    a. Remove the knife under sterile conditions
    b. Leave the knife in place and obtain imaging before operative planning
    c. Clamp the wound around the knife to control bleeding
    d. Apply a tourniquet above the knee and immediately remove the knife
    e. Attempt gentle withdrawal while applying manual pressure

30. A 53-year-old man suffers blunt orbital trauma. He has diplopia, restricted upward gaze, and infraorbital numbness. CT shows an orbital floor fracture with muscle entrapment. What is the most important next step?
    a. Ophthalmology consultation for operative planning
    b. Immediate surgical repair of the fracture
    c. Apply direct pressure to prevent hematoma expansion
    d. Discharge with outpatient follow-up in 2 weeks
    e. Prophylactic systemic steroids to reduce orbital swelling

31. A 34-year-old pregnant G1 P0 female blunt trauma patient at 28 weeks is on a backboard in the Ed. She becomes progressively tachycardic and hypotensive, though no bleeding source is identified. What is the most likely cause?
    a. placental abruption
    b. supine hypotensive syndrome due to aortocaval compression
    c. tension pneumothorax
    d. pulmonary embolism
    e. acute uterine rupture

32. A 76-year-old woman presents with head trauma after a ground-level fall. She is alert and without focal deficits. She is on apixaban for atrial fibrillation. CT shows a small subdural hematoma. What is the next best step?
    a. Discharge home with close family observation.
    b. Repeat CT scan in 24 hours without admission.
    c. Admit for observation and initiate anticoagulant reversal.
    d. Begin prophylactic hyperventilation to lower ICP.
    e. Schedule elective neurosurgical follow-up in 2 weeks.

33. A 7-year-old girl falls from a horse. She is alert, has normal breath sounds, but CXR shows a large right-sided hemothorax. A chest tube is placed with an initial return of 1,600 mL of blood. What is the next best step?
    a. Observe closely and continue chest tube drainage.
    b. Continue resuscitation and repeat chest X-ray in 1 hour.
    c. Perform immediate thoracotomy.
    d. Clamp the chest tube to prevent further blood loss.
    e. Replace blood volume with crystalloids only.

34. A 25-year-old motorcyclist sustains an open tibia fracture with gross contamination. On arrival: HR 110, BP 118/70, RR 22, GCS 15. The wound is 12 cm long with devitalized tissue and exposed bone. What is the most appropriate immediate management step?
    a. IV antibiotics and urgent operative debridement
    b. Irrigation and primary closure in the ED
    c. IV antibiotics and operative debridement in 12 hours
    d. Splint immobilization, antibiotics when in OR
    e. External fixation with debridement after 24 hours

35. A 21-year-old man presents with a posterior knee dislocation after a football injury. After reduction, distal pulses are not palpable but Doppler shows weak monophasic signals. ABI is 0.7. What is the best next step?
    a. Observation and serial exams
    b. CT angiography of the injured limb
    c. Immediate fasciotomy without imaging
    d. Proceed directly to surgical vascular exploration
    e. MRI to evaluate ligamentous injury

36. A 27-year-old motorcyclist presents with an unstable pelvis and hemodynamic instability. A pelvic binder is applied and massive transfusion started. Despite resuscitation, the patient remains unstable. FAST is negative. What is the next best step?
    a. External fixation in the OR
    b. CT scan of the abdomen/pelvis
    c. Exploratory laparotomy
    d. Angiography with embolization
    e. Intravenous tranexamic acid only

37. A 26-year-old man with 35% TBSA burns has been resuscitated with lactated Ringer's. Despite this, urine output is 20 mL/hr. What is the best next step?
    a. Increase fluid rate
    b. Add IV furosemide
    c. Insert dialysis catheter
    d. Administer IV dopamine
    e. Restrict fluids to avoid edema

38. A 45-year-old man with multiple fractures is hypothermic (31°C) in the trauma bay despite warmed fluids. Which additional step best prevents further heat loss?
    a. Stop active resuscitation until patient rewarmed
    b. Cover wounds with wet sterile dressings
    c. Increase trauma bay temperature to ≥26°C (80°F)
    d. Place patient on a metal backboard
    e. Administer corticosteroids

39. A 21-year-old man is brought to the ED after a motorcycle crash. He opens his eyes to speech, uses inappropriate words, and withdraws to pain. His GCS score is:
    a. 8
    b. 9
    c. 10
    d. 11
    e. 12

40. In the secondary survey, which exam findings best suggests a basilar skull fracture?
    a. step-off at occiput
    b. Battle's sign and raccoon eyes
    c. nystagmus with vertigo
    d. hyperreflexia
    e. loss of gag reflex