

ATLS Practice Test 6

1. A 25-year-old male is brought in after a motorcycle crash. He is unconscious, has gurgling respirations, and blood in his oropharynx. What is the first priority in his airway management?
 - a. rapid sequence intubation
 - b. suctioning the oropharynx
 - c. cricothyroidotomy
 - d. bag-mask ventilation
 - e. insertion of an oral airway
2. Which of the following is the most immediate life-threatening chest injury that requires needle decompression?
 - a. flail chest
 - b. massive hemothorax
 - c. tension pneumothorax
 - d. cardiac tamponade
 - e. open pneumothorax
3. A 17-year-old helmeted motorcyclist is struck broadside by an automobile at an intersection. He is unconscious at the scene with a blood pressure of 140/90 mm Hg, heart rate of 90 beats per minute, and respiratory rate of 22 breaths per minute. His respirations are sonorous and deep. His GCS score is 8. Immobilization of the entire patient may include the use of all the following EXCEPT
 - a. air splints
 - b. bolstering devices
 - c. a long spine board
 - d. a scoop-style stretcher
 - e. a semirigid cervical collar
4. A 35-year-old male with blunt trauma has a GCS of 6. Pupils are unequal. What is the next best step?
 - a. mannitol IV and observe
 - b. RSI and hyperventilate; urgent neurosurgical consultation
 - c. place in Trendelenburg position, cricothyrotomy; urgent neurosurgical consultation
 - d. Dexamethasone IV
 - e. noncontrast head CT

5. A 54-year-old male presents to the emergency department after a motorcycle accident. He is complaining of severe right hip pain and is unable to bear weight on the affected leg. On physical examination, you note shortening and marked external rotation of the right lower extremity. Which of the following is the most likely diagnosis?
 - a. pubic symphysis diastasis
 - b. hip fracture
 - c. pelvic fracture
 - d. femur fracture
 - e. hip dislocation
6. A patient arrives hypotensive after a stab wound to the abdomen. Which of the following is most appropriate?
 - a. CT abdomen with contrast
 - b. FAST exam and laparotomy if positive
 - c. RSI
 - d. give vasopressors to normalize BP
 - e. plain abdominal radiographs
7. A crosstable lateral x-ray of the cervical spine
 - a. must precede endotracheal intubation.
 - b. excludes serious cervical spine injury.
 - c. is an essential part of the primary survey.
 - d. is not necessary for unconscious patients with penetrating cervical injuries.
 - e. is unacceptable unless 7 cervical vertebrae and the C-7 to T-1 relationship are visualized.
8. Which of the following is true regarding pediatric airway management?
 - a. cricothyroidotomy is the first-line surgical airway in children under 12
 - b. children desaturate more slowly than adults
 - c. the narrowest part of the airway is the cricoid cartilage
 - d. a cuffed endotracheal tube is contraindicated in all pediatric patients
 - e. children have relatively smaller tongues
9. A 30-year-old man with 40% TBSA burns is brought to the ED. He has been receiving LR at 500 mL/hr for the past 30 minutes since the injury. His ideal body weight is 80 kg. The primary survey has just been completed. The infusion rate should now be adjusted to:
 - a. 800 mL/hr
 - b. 600 mL/hr
 - c. 400 mL/hr
 - d. 300 mL/hr
 - e. 200 mL/hr

10. A 20-year-old car crash victim is brought in on a backboard with a rigid cervical collar. He is alert, moving all extremities, no tenderness over the cervical spine, no distracting injuries, and not intoxicated. What is the next best step?
 - a. keep collar on until CT cervical spine
 - b. keep collar on until X-ray cervical spine
 - c. remove cervical collar
 - d. keep collar on until MRI cervical spine
 - e. keep collar until neurologist review
11. A 28-year-old male presents after a high-speed motor vehicle collision. He is hypotensive and has an unstable pelvis on exam. FAST is negative. Which of the following is the best immediate step to control pelvic hemorrhage in the resuscitation bay?
 - a. external pelvic binder applied at the greater trochanters
 - b. emergency laparotomy
 - c. pelvic X-ray before any intervention
 - d. interventional radiology embolization
 - e. external pelvic binder applied at the iliac crests
12. Which of the following is indicated within the first 3 hours of major hemorrhagic trauma to reduce mortality from bleeding?
 - a. high-dose steroids
 - b. tranexamic acid (TXA) IV bolus then infusion
 - c. mannitol prophylaxis
 - d. normal saline bolus to match blood loss
 - e. recombinant factor VIIa
13. Which statement best defines a massive transfusion and an appropriate initial transfusion strategy in trauma?
 - a. Replacement of >10 units PRBCs in 24 hours; balanced 1:1:1 transfusion strategy (PRBCs:plasma:platelets) is recommended.
 - b. Any transfusion >2 units is considered massive.
 - c. Replacement of >5 units PRBCs in 24 hours; give only PRBCs until bleeding controlled.
 - d. Replacement of entire blood volume in 48 hours; balanced 1:1:1 transfusion strategy (PRBCs:plasma:platelets) is recommended.
 - e. Replacement of >20 units PRBCs in 12 hours.
14. Which clinical finding is most suggestive of cardiac tamponade in the trauma patient?
 - a. Hypotension, distended neck veins, muffled heart sounds
 - b. Hypotension with loud heart sounds and clear lungs
 - c. Hypertension, bradycardia, and irregular respirations
 - d. Hypotension and unilateral absent breath sounds
 - e. Hypotension and crepitus over the chest wall

15. An electrician is electrocuted by a downed power line after a thunderstorm. He apparently made contact with the wire at the level of the right mid thigh. In the emergency department his vital signs are normal and no arrhythmia is noted on ECG. On examination, there is an exit wound on the bottom of the right foot. His urine is positive for blood by dipstick, but no RBCs are seen microscopically. Initial management should include
 - a. immediate angiography
 - b. aggressive fluid infusion
 - c. intravenous pyleography
 - d. debridement of necrotic muscle
 - e. admission to the intensive care unit for observation
16. Which is the first step in managing severe extremity hemorrhage?
 - a. direct pressure over the wound
 - b. immediate surgical exploration
 - c. apply a tourniquet
 - d. elevation of limb
 - e. give IV tranexamic acid
17. Which is part of the secondary survey rather than the primary survey?
 - a. airway with cervical spine control
 - b. focused assessment with sonography for trauma (FAST)
 - c. head-to-toe examination including detailed neurological exam
 - d. application of tourniquets for exsanguinating limb hemorrhages
 - e. monitoring airway patency continuously
18. A 2-year-old child in hypovolemic shock from blunt trauma requires initial fluid resuscitation. The recommended initial bolus is:
 - a. 20 mL/kg isotonic crystalloid bolus, repeated as necessary
 - b. 10 mL/kg bolus only once
 - c. 30 mL/kg bolus of D5W
 - d. 50 mL/kg of colloid solution
 - e. No fluids—start vasopressors immediately
19. A patient with severe facial fractures has massive oropharyngeal bleeding and expanding facial swelling causing airway compromise. Which airway approach is preferred?
 - a. awake fiberoptic nasotracheal intubation
 - b. rapid sequence orotracheal intubation if possible; if impossible, early surgical airway (cricothyrotomy)
 - c. bag-mask ventilation only until swelling subsides
 - d. tracheostomy
 - e. nasal airway insertion

20. Which finding most strongly suggests heatstroke (rather than heat exhaustion) requiring immediate aggressive cooling?
- a. elevated core temperature with altered mental status or neurologic dysfunction
 - b. profuse sweating and normal mental status
 - c. nausea and headache with stable vitals
 - d. mild tachycardia without hyperthermia
 - e. dizziness that resolves with rest
21. Early central venous pressure monitoring during fluid resuscitation in the emergency department has the greatest utility in a
- a. patient with a splenic laceration.
 - b. patient with an inhalation injury.
 - c. 6-year-old child with a pelvic fracture.
 - d. patient with a severe cardiac contusion.
 - e. 24-year-old man with a massive hemothorax.
22. In trauma resuscitation, why must IV fluids and blood products be warmed before administration?
- a. To prevent electrolyte imbalance
 - b. To prevent dilutional coagulopathy
 - c. To prevent hypothermia and worsening coagulopathy and acidosis
 - d. To increase rate of infusion
 - e. To prevent fluid extravasation
23. A 40-year-old trauma patient opens eyes only to pain, utters incomprehensible sounds, and withdraws from painful stimuli. What is the GCS score?
- a. 5
 - b. 6
 - c. 7
 - d. 8
 - e. 9
24. Which is the most sensitive test for intra-abdominal injury?
- a. FAST
 - b. diagnostic peritoneal lavage (DPL)
 - c. CT abdomen with IV contrast
 - d. abdominal X-ray
 - e. physical examination

25. Which airway maneuver is contraindicated in patients with suspected cervical spine injury?
- jaw thrust
 - chin lift
 - oropharyngeal airway insertion
 - suctioning
 - bag-mask ventilation
26. Preventing the “lethal triad” includes all EXCEPT:
- active warming to avoid hypothermia
 - early transfusion of blood products to reduce coagulopathy
 - generous crystalloids to avoid acidosis
 - control of bleeding early
 - supplemental oxygen if needed
27. A 40-year-old male presents after blunt left orbital trauma. He has proptosis, decreased vision, tense orbit, and relative afferent pupillary defect. What is the best immediate intervention?
- emergent lateral canthotomy and cantholysis
 - IV mannitol
 - high-dose IV steroids
 - slit lamp exam with appropriate interventions
 - immediate globe exploration
28. Which action best reflects culturally competent patient-centered care in trauma?
- Providing only technical information and avoiding discussions about prognosis.
 - Providing interpreter services, respecting cultural preferences, and involving family decision-makers as appropriate.
 - Pushing for immediate written consent in English only.
 - Assuming all patients want the same goals of care.
 - Projecting personal opinions regarding different religions.
29. A 30-year-old construction worker has prolonged limb compression. On release, he develops shock, hyperkalemia, and metabolic acidosis. What is the best immediate management?
- fasciotomy
 - aggressive IV fluids
 - immediate tourniquet placement superior to the injury
 - calcium IV
 - dialysis

30. Which is true about trauma in children?
- a. Their relatively compliant chest wall often masks significant thoracic injury despite a normal exam.
 - b. They compensate poorly for hypovolemia and crash early.
 - c. FAST is highly sensitive in children and replaces CT.
 - d. They have lower blood volume per kg than adults.
 - e. Hypotension is an early sign of blood loss in children.
31. Which statement about REBOA (Resuscitative Endovascular Balloon Occlusion of the Aorta) is most accurate?
- a. REBOA is a universally proven mortality-reducing intervention and should replace thoracotomy in all settings.
 - b. REBOA always prevents the need for definitive hemorrhage control surgery.
 - c. REBOA is contraindicated in all pelvic fractures.
 - d. REBOA is an adjunct for selected patients with life-threatening hemorrhage below the diaphragm who are unresponsive or transiently responsive to resuscitation; its use and outcomes vary by center and experience.
 - e. REBOA is recommended for patients with major thoracic hemorrhage or pericardial tamponade.
32. A 39-year-old female presents to the emergency department after a high-speed motor vehicle collision. She is awake and alert, with stable vital signs. On physical examination, you note tenderness over the left lower chest wall and decreased breath sounds on the left side. Which of the following imaging studies is the next most appropriate?
- a. chest X-ray
 - b. contrast CT scan of the chest
 - c. ultrasound of the chest
 - d. MRI of the chest
 - e. mammography
33. A 30-year-old with flame burns involving both legs (front and back) and the anterior abdomen presents to the ED. According to the Rule of Nines, what is the approximate %TBSA burned?
- a. 18%
 - b. 27%
 - c. 36%
 - d. 45%
 - e. 54%

34. Which of the following is the best estimate of the lower limit of normal systolic BP in children?
- $50 + (2 \times \text{age in years})$
 - $60 + (2 \times \text{age in years})$
 - $70 + (2 \times \text{age in years})$
 - $80 + (2 \times \text{age in years})$
 - 85 mmHg for all children
35. Which is the most important initial management for a patient with a flail chest?
- chest wall fixation
 - oxygen supplementation and adequate ventilation
 - tube thoracostomy
 - needle decompression
 - intercostal nerve block
36. A patient with a tibial fracture develops severe pain out of proportion to injury, pain with passive stretch, and tense swelling. DP and PT pulses are still palpable. What is the next step?
- elevate the limb and re-evaluate
 - ice packs and analgesia
 - immediate fasciotomy
 - monitor closely
 - thrombolysis
37. A victim of an explosion presents with bilateral tympanic membrane rupture but normal vital signs. Which of the following should you be most concerned about next?
- spinal cord transection
 - hollow viscus injury from primary blast wave
 - femur fracture from secondary blast
 - smoke inhalation
 - tension pneumothorax
38. Why are elderly trauma patients at higher risk of morbidity and mortality compared to younger adults?
- They usually sustain more severe injuries
 - Stronger inflammatory response
 - Reduced physiologic reserve and greater comorbidities
 - ATLS protocols are not applied to elderly
 - Polypharmacy

39. Which of the following is an indication for emergency department thoracotomy?
- a. blunt trauma with no signs of life at the scene
 - b. penetrating thoracic trauma with witnessed signs of life and pulseless arrival
 - c. blunt chest trauma with hypotension
 - d. penetrating extremity trauma with hemorrhage
 - e. all cardiac arrests regardless of cause
40. A patient presents to a Level III trauma center that has limited OR availability. She sustained multiple long-bone fractures after an MVC. The best system action is
- a. ignore transfer guidelines and keep the patient indefinitely.
 - b. stabilize, provide hemorrhage control/analgesia/immobilization as needed, and arrange timely transfer to a higher-level center.
 - c. discharge home with pain medications.
 - d. wait for weeks until elective OR time opens.
 - e. stabilize, provide hemorrhage control/analgesia/immobilization as needed, and explain to the patient the issue and that it is now her problem.