

Florida's Premier Provider Of Quality Medical Training Programs
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Since 1988

ITLS

International Trauma Life Support
9th Edition

Preparation Packet Advanced Provider Version

The ITLS Course is an intense program that emphasizes out of hospital basic and advanced trauma management. It is mandatory that participants read the textbook prior to entering the course – the text is available from ITLS international or we may have a limited supply in our office. The skills stations require you to be familiar with the procedures in order to get the most hands on time.

You <u>must</u>, review the text, read this packet and complete the pretest at the back of this booklet before entering the course.

Pretest will be collected at the beginning of the class.

Shaun Fix

Emergency Medical Consultants

Florida's Premier Provider Of Quality Medical Training Programs

Nationally Accredited and OSHA Programs
CEU Provider

Since 1988

Welcome to Emergency Medical Consultants' International Trauma Life Support Course. We are

pleased that you have chosen us to provide you with this outstanding course and are sure that this will be a

worthwhile seminar for you as a medical professional. The course will begin at 8:30am.

**Please remember, prior to the course, you will need to read the text and complete the pretest. The

pretest will be collected prior to registration on day one.

The ITLS course is an intense 16-hour program, which emphasizes out of hospital basic and advanced

trauma management. It is mandatory that participants read the textbook prior to entering the course. The

skill stations will require you to be familiar with the procedures in order to get the most hands on practice

time.

We have also attached the mandatory skills testing criteria for your review. The ITLS book can be

purchased from ITLS International 1-888-495-4857, online at www.itrauma.org or from our website

www.medicaltraining.cc in the "purchase discounted texts" section. (you can check other sites as well)

We look forward to having you at the course and will be happy to answer any questions you may have;

just call our office at 772-878-3085.

Sincerely,

Shaun Fix

Day 1

Lecture Faculty -

8:30 - 9:00	Welcome, overview & collect pre-tests
9:00 - 9:30	Size up, standard precautions
9:30 - 10:30	Trauma assessment and trauma arrest Assessment DVD
10:30 - 10:45	Break
10:45 - 11:15	Trauma airway management – Chapter
11:15 - 11:45	Thoracic trauma – Chapter 6
11:45 - 12:15	Shock - Chapter 8
12:15 - 12:45	Spinal cord trauma – Chapter 11

12:45 - 1:45 Lunch

Skills stations

1:45 - 5:00 Skills Faculty -

Advanced airway -

Neutral C-spine

Frontal while supine & seated

Bougie Stylette

Perilaryngeal Airways

Cric

Plural decompression

Back boarding & rapid extrication –

Rapid extrication from car

KED review

Supine straddle slide onto board

Supine 45° slide onto board

Adult IO & fluid resuscitation

• Patient assessment, splints & helmets –

ITLS assessment skills

Traction splint

Vacuum or other splints

Helmet Management

Reverse Spine Board (removing patient from LSB)

Day 2

4

Lecture Faculty -

8:30 - 9:00	Head Trauma – Chapter 10
9:00 - 9:30	Trauma arrest – Chapter 21
9:30 - 10:00	Pediatric trauma – Chapter 17
10:00 - 10:30	Geriatric trauma – Chapter 18
10:30 - 10:45	Break
10:45 - 11:15	Extremity trauma – Chapter 14
11:15 -11:45	Burns – Chapter 16
11:45 - 12:15	Abdominal trauma – Chapter 13

12:15 - 1:00 Lunch

1:00 - 2:30 Practice / Evaluation

*** All Faculty ***

Patient assessment skills practice

2:30 Patient assessment evaluation stations

5:30 Written exam

All Day 2 Instructors arrive at 12:00 to set up

ITLS - Acronyms

INJURIES

D eformity

C ontinusions

A brasions

P enetrations

P aradoxical Movement (in chest)

B urns

T enderness

L acerations

S welling

CNS

P ulses

M otor

S ensation

A lert

V erbal

P ain

U nresponsive

INTERVIEW / HISTORY

S igns symptoms

A llergies

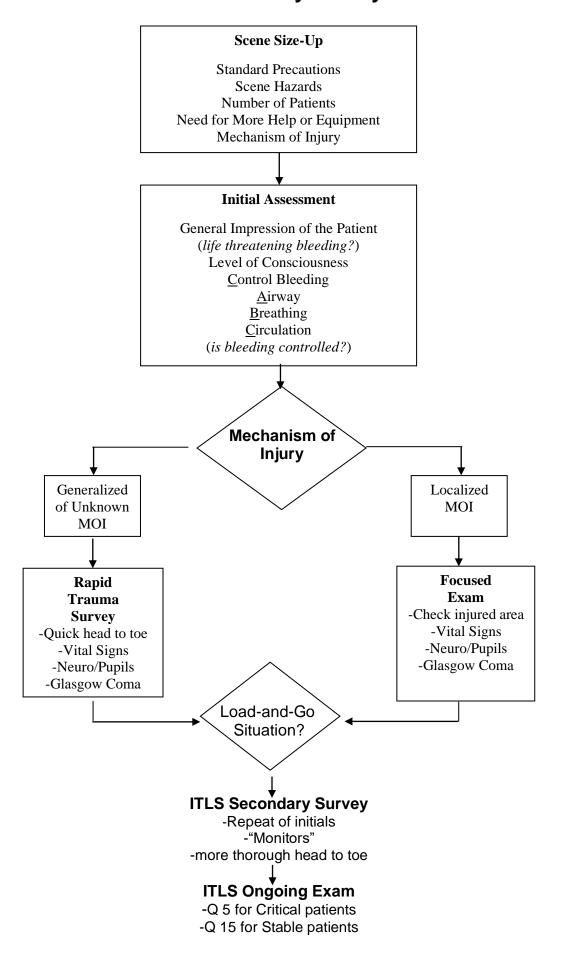
M edication

P ast medical hx

L ast oral intake

E vents

ITLS Primary Survey



International Trauma Life Support Testing Criteria

The ITLS course requires attendance at all lectures and skills stations. The written exam is 50 questions and requires 74% as a passing rate. Students who do <u>not</u> make 74% may not retest on the same day.

The skills scenario exam is graded as a pass / fail with emphasis on safety, recognition of potentially life threatening conditions, complete and proper assessment, management, and transport. Instructors will evaluate the participant using the following criteria.

Inadequate Rating

- 1. Disorganized survey
- 2. Prolonged on-scene times in the setting of "load and go" situations
- 3. Critical actions missed (such a hyperventilation of coma patient)
- 4. Missing specific items listed on individual grading sheets
- 5. Making fatal errors (such as poor cervical spine management)
- 6. Causes "death" of patient

Adequate Rating

- 1. Reasonable organization of assessment survey
- 2. Accurate identification of "load and go"
- 3. Abbreviated on-scene times for "load and go"
- 4. Performs critical actions
- 5. Makes no "fatal" errors

Good Rating

- 1. Organized survey and solid overall performance
- 2. Interacts well with patient and team members
- 3. Performs all critical action
- 4. Abbreviated on-scene times for "load and go" situations
- 5. Correctly performs or oversees performance of all critical interventions

Excellent Rating

- 1. Excellent survey organization
- 2. Excellent patient care
- 3. Interacts well with patient and team members
- 4. Directs the team well, displays leadership
- 5. Performs all critical actions
- 6. Demonstrates clear understanding of out of hospital trauma assessment and management
- 7. Cooperative and supportive in the learning environment
- 8. Conveys attitude of interest and desire to help teach trauma assessment and management

	[] Poois				
Student Name: Date: Scenario #: [] Basic [] Practice [] Test [] RT					
Time Transported:		Time Secondary completed:			
	Time	Time			

ACTION	1	COMMENTS
PATIENT ASSESSMENT - PRIMARY SURVE		
Scene Size-up		
Standard precautions		
Scene Hazards	 	
Number of Patients	 	
Need for More Help or Equipment		
Mechanism of Injury		
General Impression Age, Sex, Weight	l I	
General Appearance		
Body Position		
Position in Environment		
Patient Activity		
Obvious Severe Injury or Major Bleeding		
LOC AVPU		
Airway Snoring, Gurgling, Stridor, Silence		
Breathing Present? Rate, Depth, Effort		
Radial/Carotid Pulses Present? Rate, Rhythm, Quality		
Skin Color, Temp, Moisture, Capillary Refill		
Uncontrollable external hemorrhage?		
Head and Neck		
Major facial injuries		
Bruising, swelling, penetrations		
Subcutaneous emphysema?		
Neck vein distention?		
Tracheal deviation?		
Chest Look: Asymmetry, Contusion, Penetrations, Paradoxical Motion, Chest Rise		
Feel: Tenderness, Instability, Crepitation		
Breath Sounds Present? Equal?		
If decreased breath sounds, percussion		
Heart Tones		
Abdomen Look: bruising, penetration/evisceration		
Gently palpate: tenderness, rigidity, distention		
Pelvis Deformity, penetrating wounds, TIC		
Lower Extremities		
Upper: swelling, deformity, TIC		
Lower: scan wounds, swelling, deformity Motor, sensory before transfer to backboard	[
-	 	
Upper Extremities Scan wounds, swelling, deformity		
Motor, sensory before transfer to backboard		
Posterior Penetrations, deformity, edema		
IF CRITICAL, TRANSFER TO AMBULANCE		

ACTION	✓	COMMENTS
Baseline Vital Signs HR, RR, BP		
History SAMPLE		
IF ALTERED MENTAL STATUS Pupils Size? Reactive? Equal?		
Glasgow coma scale		
Orientation, emotional state		
Signs of cerebral herniation		
Medical identification devices		
Blood glucose		
Critical transport decision		

ACTION	✓	COMMENTS
PATIENT ASSESSMENT - REASSESSMENT I	XAM	1
Subjective Ask patient if changes in how feels		
Reassess mental status LOC, pupils		
If altered mental status Recheck GCS		
Reassess airway		
Reassess breathing and circulation Recheck vital signs		
Skin color, condition, temperature		
Check for neck vein distention		
Check for tracheal deviation		
Recheck chest		
Breath sounds: Quality? Equal?		
Reassess heart sounds		
Reassess abdomen - if possible injury Development of tenderness, distention, rigidity		
Check all identified injuries		
For example:		
Lacerations for bleeding PMS distal to injuries on extremities Flail segments Pneumothorax Open chest wounds		
Check all interventions		
For example:		
ET tube for patency and position		
Oxygen for flow rate IVs for patency and fluid rate		
Seals on sucking chest wounds		
Patency of decompression needle Splints and dressings		
Impaled objects for stabilization		
If pregnant, body position		
Cardiac monitor, Sp0 ₂ , ETCO ₂		

GRADE KEY:	[✓] Completed, skill performed in sequence	
	[D] Delayed, performed out of sequence	
	[X] Skill not performed, too late or incorrectly	Sept 2019

ACTION	✓	COMMENTS
PATIENT ASSESSMENT - SECONDARY SU	IRVEY	
Repeat Initial Assessment		
Repeat vital signs		
Consider Cardiac monitor, Sp0 ₂ , EtCO ₂		
LOC AVPU		
If conscious, orientation and emotional state	ļ	
If altered mental status, GCS		
If altered mental status, blood glucose		
If altered mental status, Sp0 ₂		
If altered mental status, consider naloxone		
Pupils Size, equality, response to light		
Motor Move fingers and toes?		
Sensation Feel fingers and toes?		
If unconscious, respond to pinch?		
Head DCAP-BTLS-TIC		
Raccoon eyes		
Battle's signs		
Drainage from ears or nose		
Mouth		
Reassess airway		
Neck DCAP-BTLS-TIC		
Neck vein distention?		
Tracheal deviation?		
Chest DCAP-BTLS-TIC, paradoxical movement		
Instability and crepitation		
Breath sounds Present? Equal? Quality?		
If decreased breath sounds, percussion		
Heart sounds		
Recheck wound seals, injuries		
Abdomen Signs of blunt or penetrating trauma		
Palpate all quadrants for tenderness, rigidity		
Pelvis and Extremities DCAP-BTLS-TIC		
PMS distal to injuries on extremities	ĺ	
IF CRITICAL, TRANSPORT IMMEDIATELY		

CRITICAL ACTIONS		
Completes scene size-up and uses universal precautions		
Performs initial assessment and interacts with patient		
Performs organized rapid trauma survey or focused exam		
Ensures spinal motion restriction when clinically indicated		
Ensures appropriate oxygenation and ventilation		
Recognizes and treats all life-threatening injuries		
Uses appropriate equipment and techniques		
Recognizes critical trauma, time and transport priorities		
Performs ITLS Secondary Survey (when time permits)		

IMPORTANT ACTIONS		
Performs ITLS Reassessment Exam (when time permits)		
Utilizes time efficiently		
If critical, notifies medical direction early		
Gives appropriate report to medical direction		
Demonstrates acceptable skill techniques		
Displays leadership and teamwork		

ADDITIONAL ACTIONS		
Finish bandaging and splinting after ITLS Secondary Survey (when time permits)		
Vital signs every 5 minutes for critical patents, every 15 minutes for stable		
Repeats Reassessment Exam each time patient moved or intervention performed		
Repeats Reassessment Exam if patient condition worsens		
Appropriately interacts with patient, family and bystanders		
Communicates with patients and/or bystanders		

OVERALL GRADE					
[] Proficient (IP)	[] Competent	[] Inadequate			
Comments:					
Lead Instructor Name (print):	Signature:				
Instructor Name (print):	Signature:				
Instructor Name (print):	Signature:				

Spinal Immobilization Controversy

The NAEMSP (National Association of EMS Physicians) is reported to have hotly debated the following draft of a "spinal immobilization" position paper before signing on the ACS (American College of Surgeons) version, "Position Statement EMS spinal precautions and the use of the long backboard".

The National Association of EMS Physicians believes that:

- There is no demonstrated outcome benefit of maintaining rigid spinal immobilization with a long backboard during EMS transport of a trauma patient.
- The long backboard can induce respiratory compromise, patient agitation and additional pain. Further, the backboard can decrease tissue perfusion at pressure points, leading to the development of pressure sores.
- A long backboard or similar device may be useful to facilitate spinal precautions during patient extrication.
- Patient time on long backboards should be minimized.
- Securing a trauma patient to an EMS stretcher without a long backboard is acceptable for maintaining spinal precaution during transport.
- Implementation of protocols that deemphasize the use of the long backboard should involve all affected partners in the EMS system.
- This is not a protocol change This is general info.



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- 1. In a rear-impact motor vehicle collision, which area of the spine is most susceptible to injury?
 - A. Cervical
 - B. Thoracic
 - C. Lumbar
 - D. Sacral-coccygeal
- 2. A 36-year-old male sustains blunt force thoracic trauma and fits the criteria for a loadand-go patient. Which of the following should be performed on the scene?
 - A. Obtain an ECG
 - B. Establish vascular access
 - C. Obtain a finger-stick serum lactate level
 - D. Assess for other potentially life-threatening conditions
- 3. The use of external laryngeal manipulation:
 - A. Decreases the risk of airway trauma
 - B. Reduces gastric distention
 - C. Improves glottic visualization
 - D. Causes aspiration
- 4. A pericardiocentesis is performed to:
 - A. To remove fluid from the lining around the lungs
 - B. To remove fluid from the lining around the heart
 - C. To inject medications directly into the heart
 - D. To monitor stroke volume
- 5. A 56-year-old male sustains a gunshot wound to the abdomen. Vital signs are BP 74/32, P 136 present only at the carotid, and R 24 and shallow. The target of fluid resuscitation is:
 - A. Return of peripheral pulses
 - B. Maintenance of central pulses
 - C. Systolic blood pressure of 110-120
 - D. Pulse rate of 100
- 6. An unconscious 15-year-old male was struck on the head with a baseball bat. His arms and legs are extended and his right pupil is dilated and fixed. You should:
 - A. Insert an oropharyngeal airway, administer oxygen, and restrict fluids
 - B. Apply a non-rebreather mask, restrict fluids, and administer Mannitol
 - C. Perform nasotracheal intubation, restrict fluids, and provide adequate ventilation
 - D. Perform bag-mask ventilation at 20 per minute

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- 7. Which of the following mechanisms of injury does not commonly cause damage to the spinal cord?
 - A. Hyperextension
 - B. Hyperflexion
 - C. Lateral stress
 - D. Compression
- 8. A 4-year-old female is unconscious after falling off a bicycle. Which of the following is the best method to open the airway?
 - A. Modified jaw-thrust
 - B. Head tilt
 - C. Neck flexion
 - D. Neck lift
- 9. When performing the ITLS Primary Survey, the team leader may minimize errors by:
 - A. Performing all interventions
 - B. Limiting crew roles
 - C. Permitting crew to continue the assessment
 - D. Delegating interventions
- 10. You have placed an NPA in your patient and now observe mild hemorrhage from the nares. You should:
 - A. Immediately remove the NPA and pack the nose with gauze
 - B. Immediately remove the NPA and reinsert on the opposite nare
 - C. Leave the NPA in place so as not to disturb the clot or reactivate bleeding
 - D. Contact medical control as an NPA will not cause hemorrhage
- 11. A 27-year-old male with blunt chest trauma from a motor vehicle collision was successfully intubated at the scene. While ventilating the patient, you note resistance with absence of right chest wall movement. You should suspect a:
 - A. Flail chest
 - B. Gastric distention
 - C. Mucus obstruction
 - D. Tension pneumothorax

- 12. A 34-year-old man has a gunshot wound to the right groin area. Arterial bleeding, which cannot be controlled with direct pressure or tourniquet, is coming from the wound. The patient appears confused, diaphoretic, and has weak peripheral pulses. What is the appropriate fluid resuscitation regimen for this patient?
 - A. Intravenous fluid at a "keep open" rate
 - B. Intravenous fluid; give enough fluid to maintain peripheral pulses
 - C. Intravenous fluid at a "wide open" rate
 - D. No intravenous access should be established in this situation
- 13. The gold standard to confirm that the endotracheal tube is placed in the trachea is:
 - A. Evaluation of breath sounds
 - B. Equal chest rise and fall
 - C. Waveform capnography
 - D. Presence of condensation in the tube
- 14. Common mechanisms of injury for the pediatric patient include all of the following except:
 - A. Falls
 - B. Animal bites
 - C. Burns
 - D. Motor vehicle collisions
- 15. Which of the following injuries would change a trauma patient's transport classification from "stable" to "load and go"?
 - A. Clavicle fracture
 - B. Pelvic fracture
 - C. Bilateral humerus fractures
 - D. Bilateral tibia fractures
- 16. Which of the following findings would not make a patient difficult to ventilate with a bag-valve mask?
 - A. Beard
 - B. Obesity
 - C. Elderly patient
 - D. Multiple nose piercings
- 17. What is the most frequent cause for an intubated trauma patient to develop poor lung compliance while being ventilated?
 - A. Tracheal extubation
 - B. Pericardial tamponade
 - C. Gastric distention
 - D. Tension pneumothorax





18. Hemostatic agents applied directly to the source of bleeding must be used in conjunction with:

- A. Direct pressure to the wound
- B. Tourniquets proximal to the wound
- C. Pressure points to arteries proximal to the wound
- D. Elevation of the wound above the level of the heart

19. Routine use of hyperventilation in the traumatic brain injury (TBI) patient will:

- A. Cause vasoconstriction and increased cerebral ischemia
- B. Cause vasodilation and decreased intracranial pressure (ICP)
- C. Cause an increase of end-tidal CO₂
- D. Cause peripheral hypoxia and cyanosis

20. Which finding requires interruption of the ITLS Primary Survey?

- A. Complete airway obstruction
- B. Gasping respirations
- C. Impaled object in abdomen
- D. Very weak pulse

21. Bag-valve-mask ventilation:

- A. Rarely causes gastric distention due to low airway pressures
- B. Is more effective in patients whose dentures have been removed
- C. Is easily accomplished by one rescuer at the head
- D. May exceed 60 cm H₂O pressure in the airway

22. Which of the following is true regarding pulmonary contusion?

- A. It is uncommon in chest trauma
- B. It is caused by hemorrhage into the lung parenchyma
- C. It is only caused by blunt force trauma
- D. It rapidly develops after injury

23. A 25-year-old female was stabbed in the left arm. She presents with an altered mental status and signs of shock. Bleeding is controlled by direct pressure and use of a tourniquet. Which intravenous fluid therapy is appropriate?

- A. Estimate blood loss and administer fluid at a 3:1 ratio
- B. Fluid administration of 250 mL
- C. Fluid administration to maintain systolic pressure of 60 mmHg
- D. Intravenous fluid administration bolus of 500 mL, then reassess





- 24. In the absence of herniation syndrome, adult patients with suspected traumatic brain injury should be ventilated as a rate of:
 - A. 8-10 per minute
 - B. 12-14 per minute
 - C. 16-18 per minute
 - D. 20-22 per minute
- 25. What is the most likely cause of unequal pupils in a patient whose mental status is altered due to a head injury?
 - A. Increased intracranial pressure
 - B. Pre-existing condition
 - C. Alcohol intoxication
 - D. Hypotension
- 26. A 57-year-old male has a respiratory rate of 36, ETCO₂ of 30 mmHg, and an oxygen saturation of 80%. You should:
 - A. Coach the patient to slow his breathing as his ETCO₂ level indicates hyperventilation
 - B. Ventilate with a BVM at a higher rate to increase the patient's oxygen levels
 - C. Ventilate with a BVM at a rate of 6 to increase the patient's ETCO₂ level
 - D. Provide supplemental oxygen
- 27. A 31-year-old male presents with difficulty breathing, rapid and weak pulse, flat neck veins, and midline trachea. Your assessment of the left side of the chest reveals decreased breath sounds and dullness to percussion. You should suspect:
 - A. Cardiac tamponade
 - B. Flail chest
 - C. Tension pneumothorax
 - D. Massive hemothorax
- 28. A 45-year-old female is found unconscious at the scene of a motor vehicle collision. Her vital signs are BP 80/40, P 130, and R 30. Which of the following is the most likely cause for her vital signs?
 - A. Fractured lower legs
 - B. Intracranial hemorrhage
 - C. Bleeding into the chest or abdomen
 - D. Spinal cord injury with neurogenic shock



29. The cause of a secondary brain injury is:

- A. Contra-coup
- B. Coup
- C. Hemorrhage
- D. Hypoxia

30. Which one of the following is a reason to interrupt the initial assessment?

- A. Cardiac arrest
- B. Multiple open (compound) fractures
- C. Severe head injury with brain tissue visible
- D. Severe shock

31. Which of the following is not a desired characteristic of a suction device?

- A. It can be carried in an airway kit with an oxygen cylinder and other airway equipment
- B. It can be hand powered or battery powered
- C. It can generate sufficient suction and volume displacement to remove pieces of food, blood clots, and thick secretions from the oropharynx
- D. It can be powered by your portable O₂ cylinder so it is not dependent on battery power

32. What is the most serious early complication of burns from electrical contact?

- A. Cervical spine injury
- B. Cardiac arrhythmia
- C. Hypovolemic shock
- D. Renal failure

33. Which of the following changes is most useful to monitor in the child with head injury?

- A. Frequency of vomiting
- B. Level of consciousness
- C. Reflexes
- D. Sensory exam

34. A disoriented 23-year-old male is injured in a motorcycle collision. The patient appears to be intoxicated and does not want medical attention despite a large laceration on his scalp, which is actively bleeding. You should:

- A. Have the patient call a friend or family member and have them drive him home and sleep it off
- B. Discuss the impact of alcohol abuse with him
- C. Treat him as a head injured patient
- D. Wait until the patient loses consciousness and then transport

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35. When performing a needle decompression, which of the following is the best anatomical location?

- A. Directly over the top of the fifth rib in the anterior axillary line
- B. Directly over the top of the fourth rib in anterior axillary line
- C. Directly under the bottom of the third rib in the midclavicular line
- D. Directly over the top of the second rib in the anterior axillary line

36. Which of the following is true regarding trauma in the elderly?

- A. Elderly patients are less likely to bleed internally than younger patients
- B. Elderly patients have better outcomes following burns than younger patients
- C. Fatal outcomes are more likely in the elderly than in the young
- D. Motor vehicle collisions are an uncommon mechanism of injury

37. Which of the following organs will suffer the least structural damage from a gunshot wound from a rifle?

- A. Spleen
- B. Kidney
- C. Liver
- D. Lung

38. Which of the following should always be performed prior to transport?

- A. Splint all fractures
- B. Control major external bleeding
- C. Perform the ITLS Secondary Survey
- D. Assess vital signs

39. Which of the following distinguishes a tension pneumothorax from a simple pneumothorax?

- A. Tachycardia
- B. Shock
- C. Dyspnea
- D. Anxiety

40. A 25-year-old female was stabbed in the left arm. She presents with an altered mental status and signs of shock. Bleeding is uncontrolled despite direct pressure. You should:

- A. Apply a tourniquet directly over the wound
- B. Elevate the extremity above the level of the heart
- C. Apply a pressure point
- D. Apply a tourniquet proximal to the injury



- 41. An unresponsive 36-year-old female was involved in a motorcycle collision. Vital signs are BP 170/100, P 50, R 8 and GCS 3. You should suspect:
 - A. Hypovolemia
 - B. Increased intracranial pressure
 - C. Pain and anxiety
 - D. Spinal cord injury
- 42. A 42-year-old male is involved in a motorcycle collision. Which of the following assessment findings should be managed first?
 - A. Airway obstruction
 - B. Hypotension
 - C. External arterial bleeding
 - D. Open lower leg fracture
- 43. A 32-year-old male is involved in a motor vehicle collision. The steering wheel is bent. Your assessment reveals present and equal bilateral breath sounds and a rapid and weak radial pulse that disappears upon inspiration. You should suspect:
 - A. Cardiac contusion
 - B. Cardiac tamponade
 - C. Flail chest
 - D. Tension pneumothorax
- 44. Medical Director requests application of a second tourniquet. Which of the following is the appropriate site?
 - A. Distal to the injury site
 - B. Just below the first tourniquet
 - C. Directly over the first tourniquet
 - D. Directly over the wound
- 45. A 35-year-old male is alert and oriented at the scene of a motor vehicle collision complaining of knee pain and a headache. Your assessment reveals a contusion above the left eye, swelling to the left knee and unequal pupils (left is dilated). Vital signs are: BP 116/72, P 88 and R 16. You should suspect:
 - A. Alcohol intoxication
 - B. Cerebral herniation
 - C. Decreased intracranial pressure
 - D. Ocular trauma

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- 46. You have a patient with an isolated stab wound to the lateral chest. According to recent studies, which of the following procedures should be avoided?
 - A. Bag-valve-mask ventilations
 - B. Supplemental oxygen administration
 - C. Application of an occlusive dressing
 - D. Spinal motion restriction
- 47. What is the most common cause of cardiopulmonary arrest in the trauma patient?
 - A. Brain injury
 - B. Hypoxemia
 - C. Myocardial contusion
 - D. Ventricular arrhythmia
- 48. A 34-year-old female was struck by a vehicle, causing blunt force chest trauma. She is unconscious with gasping respirations, almost no air movement, a rapid, thready carotid pulse and flat neck veins. You should:
 - A. Perform a head-tilt
 - B. Perform chest thrusts
 - C. Continue the ITLS Primary Survey
 - D. Provide positive pressure ventilation
- 49. A 34-year-old male is injured in a motor vehicle collision. He complains of diffuse abdominal tenderness. Vital signs are BP 100/60, P 120 and R 28 and shallow. You should:
 - A. Administer sufficient intravenous fluids to maintain peripheral pulses
 - B. Obtain his blood sugar
 - C. Complete spinal motion restriction, start ventilations as needed, and transport immediately
 - D. Administer intravenous fluids to maintain a 130 mmHg systolic BP
- 50. An unresponsive 52-year-old male was struck in the head by the bucket of a crane. Vital signs are BP 134/80, P 88 and R 8 and shallow. The patient should be ventilated at a rate of:
 - A. 8-10 per minute
 - B. 12-14 per minute
 - C. 18-20 per minute
 - D. 20-24 per minute

50. A B C D E

25. A B C D E