

**STUDY GUIDE**  
**for**  
**Shock Trauma Resuscitation**

Scenario:

Your patient was the driver in a one-car high speed auto accident involving frontal impact with a telephone pole. He is a 19-year-old male who presents unconscious and partially trapped in the severely deformed vehicle. According to witnesses, he was driving at a high rate of speed. Upon initial examination, you immediately hear gurgling respirations. Vital signs are: weak carotid pulse rate of 120, BP-70/40, respiratory rate is 36 and shallow, skin cool, pale and clammy, capillary refill time is 4 seconds. Pulse oximetry reads 70%. Upon physical exam, you discover a bruise to the front chest wall with loose flail segment and some abdominal guarding. Lung sounds are diminished on the right side with some hyperresonance in that area.

1. Which of the following conditions indicates the need to rapidly transport your patient to a trauma center?
  - A. severe deformity to his vehicle
  - B. his respiratory rate
  - C. his systolic blood pressure
  - D. all of the above
  
2. Your initial management of this patient should be to
  - A. perform immediate nasotracheal intubation
  - B. start two large bore IV's
  - C. manually stabilize his head and neck\
  - D. place an oxygen mask on him
  
3. The gurgling noise that accompanies his breathing calls for immediate
  - A. suctioning
  - B. intubation
  - C. head-tilt/chin lift procedure
  - D. chest decompression
  
4. You are concerned about the right-sided flail segment because
  - A. it indicates lung tissue damage beneath the injury
  - B. it severely inhibits ventilation and oxygenation
  - C. it is usually accompanied by pericardial tamponade
  - D. underlying damage to the heart is expected

5. His respiratory situation indicates the need for immediate
  - A. chest decompression
  - B. Trendelenberg positioning
  - C. intubation
  - D. positive pressure ventilation
  
6. Your patient's pulse and blood pressure indicate which stage of shock?
  - A. Compensated
  - B. Irreversible
  - C. Decompensated
  - D. None of the above
  
7. The most likely cause of your patient's shock is
  - A. loss of alveoli function
  - B. internal blood loss
  - C. massive vasodilation
  - D. acute myocardial infarction
  
8. Peripheral vascular resistance is regulated in which blood vessels?
  - A. veins
  - B. venules
  - C. arteries
  - D. arterioles
  
9. Which of the following statements is **TRUE** regarding this patient?
  - A. anaerobic metabolism is occurring
  - B. resuscitation is still possible
  - C. irreversible shock will ensue if left untreated
  - D. all of the above
  
10. This patient responds to pain stimuli by moaning. He earns a \_\_\_\_\_ on the AVPU scale.
  - A. A
  - B. V
  - C. P
  - D. U

11. If used, the pneumatic antishock garment should have the following beneficial effects:
- A. autotransfusion of over 1000 ml of blood to the vital organs
  - B. decrease peripheral resistance to enhance circulation
  - C. tamponade internal abdominal hemorrhage
  - D. stop the anaerobic metabolism from progressing
12. Prehospital management fluid resuscitation of this patient should include
- A. Lactated Ringer's
  - B. 0.45% sodium chloride
  - C. 5% dextrose and water
  - D. any of the above
13. Which of the following IV equipment would best help this patient?
- A. 20 gauge, 2 inch catheter, 60 drop/ml tubing
  - B. 14 gauge, 1 inch catheter, 10 drop/ml tubing
  - C. 16 gauge, 3 inch catheter, 60 drop/ml tubing
  - D. 22 gauge, ½ inch catheter, 10 drop/ml tubing
14. By using a 12 gauge catheter instead of a 24 gauge catheter, you will flow fluid
- A. twice as fast
  - B. twice as slow
  - C. 16 times as fast
  - D. 8 times slower
15. One hour after infusing three liters of fluid into this patient, his intravascular blood volume will be increased by
- A. 3 liters
  - B. 6 liters
  - C. 2 liters
  - D. 1 liters
16. Fluid resuscitation in the field should be limited to
- A. 1 liters
  - B. 2 liters
  - C. 3 liters
  - D. none of the above

17. The Seldinger technique is used to
- A. infuse fluids under pressure
  - B. attach the IV bag directly to the blood tubing
  - C. place large bore catheters peripherally
  - D. deflate the PASG
18. During a hot load, you should always
- A. approach the helicopter from the rear
  - B. stay clear of the tail rotor
  - C. direct lights directly at the pilot
  - D. use flares instead of flashlights
19. The appropriate helicopter landing zone for a large aircraft is
- A. 60 x 60
  - B. 75 x 75
  - C. 120 x 120
  - D. 200 x 200
20. Which of the following criteria is important in establishing a landing zone?
- A. level ground
  - B. clear of debris
  - C. free of wires and trees
  - D. all of the above