



**Fundamental Critical Care Support Skill Station
Integrated Hemorrhagic Shock Scenario
Participant Guide**

Estimated completion time: 30 minutes

This skill station represents the practical application of the concepts presented in the textbook chapters, Basic Trauma and Burn Support, and Diagnosis and Management of Shock. The case scenario is presented to create a framework for emphasizing the essential concepts in the recognition of hemorrhagic shock and methods for resuscitation. The case is intended to represent common problems encountered when caring for critically ill patients.

Station Goals

The goals of this station are to:

- Demonstrate the primary and secondary surveys in trauma care.
- Discuss the role of one-to-one ratio of red blood cells to fresh frozen plasma transfusion to resuscitate hemorrhagic shock.

Participant Objectives

After completing this skill station, the student should be able to:

- Demonstrate the primary and secondary surveys in trauma care.
- Utilize the strategy of using a one-to-one ratio of red blood cells to fresh-frozen plasma to resuscitate hemorrhagic shock.

Assessment and findings: following fluid resuscitation

Vital signs

- Blood pressure 110/50 mm Hg
- Pulse 105 beats/min
- Respiratory rate 20 breaths/min
- O₂ saturation 94%
- GCS score 11

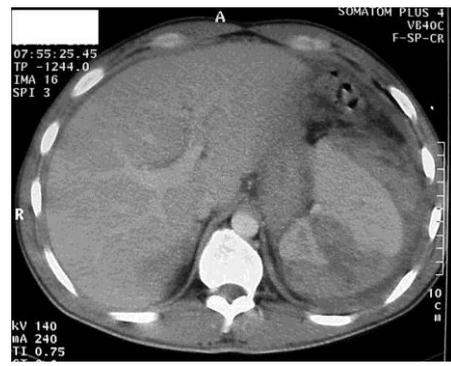
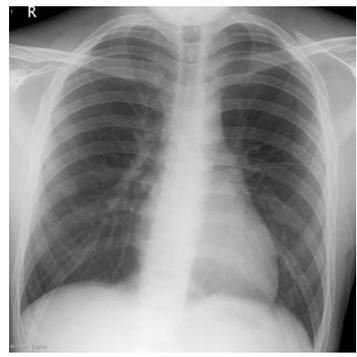
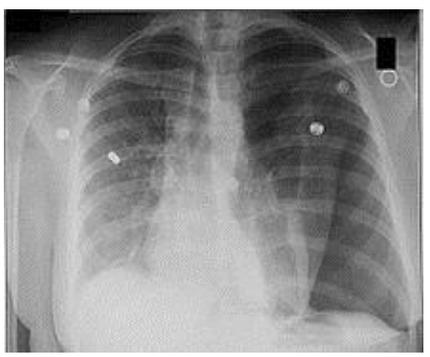
Lab studies

- White blood cells 13 x 10⁹/L
- Hemoglobin 11.5 g/dL
- Platelets 285 x 10⁹/L
- NA 135 mmol/L
- K 3.1 mmol/L
- Cl 110 mmol/L
- HCO₃ 21 mmol/L
- Blood urea nitrogen 8 mg/dL
- Creatinine 0.8 mg/dL
- Prothrombin time 18 s
- International normalize ratio 3.5
- Partial thromboplastin time 35 s
- Lactate 5 mg/dL

Effective Communication and Team Work

Debriefing

1. Review the primary survey. Intervene immediately on all injuries identified in the primary survey because they can be life-threatening. A left chest tube must be placed quickly given the numerous signs suggesting a left pneumothorax. A chest radiograph is not needed in this setting.
2. Hypotension in trauma is hemorrhage until proven otherwise. The classic teaching on resuscitation is 2 L of crystalloid followed by packed red cells; however, earlier/more aggressive use of packed cells is justified with a strong suspicion of hemorrhage (+ FAST, distended abdomen, overt hemorrhage, etc.).
3. Review one-to-one fresh frozen plasma to red blood cell resuscitation (“hemostatic resuscitation”).



Chest radiographs

CT Scan