Chest Injuries

Information Needed

1. History/mechanism: blunt or penetrating, estimated force involved, instrument causing the injury.
2. Physical findings: compromised chest wall movement, obvious wounds, subcutaneous emphysema, crepitus, jugular venous distention, respiratory distress, hypoxia, unequal breath sounds, hemoptysis, increased resistance to bagging, muffled or distant heart sounds, tracheal deviation, decreasing LOC.

Treatment

1. Protect airway and assist ventilation as needed (immobilize spine as needed).
2. Administer high flow O_2.
3. Determine vital signs (pulse, blood pressure, respirations, SpO_2)
4. Perform physical exam. (Remember a penetrating chest injury may involve the abdomen. A stab wound or bullet wound may pass through the soft tissues and muscles of the chest and cross the peritoneum entering the abdominal cavity without ever causing injury to the lungs or diaphragm.)
5. Cover open chest wounds with Vaseline gauze (Occlusive dressing secured on 3 sides).
6. Stabilize impaled objects.
7. Decompress chest if tension pneumothorax is likely causing respiratory distress. Remember asymmetric breath sounds by themselves are **not** enough to establish a tension pneumothorax. Needling a pneumothorax may make it larger.
8. Stabilize flail segment with gentle pressure.
9. Establish venous access (large bore) and give fluid boluses if needed.
10. Monitor cardiac rhythm.
11. Repeat vital signs and lung sounds. If there are asymmetric breath sounds be vigilant for signs of a developing tension pneumothorax.
12. Consult medical control for additional fluids.
13. Consider pain medication and antiemetic.

Notes

1. Stabilize impaled objects in place, do not try to remove.
2. Rapid evaluation and transport are needed with significant injury.
3. Never assume that a puncture-like wound is superficial.