CARDIAC ARREST DUE TO PHYSICAL TRAUMA

Cardiac arrest due to major blunt or penetrating trauma is managed differently than the routine cardiac arrest that is not accompanied by hypovolemia, tension pneumothorax, or cardiac tamponade. Initial management is the same, the ABC's of resuscitation, with maintenance of the airway (using the jaw-thrust without head-tilt because of the high frequency of concomitant neck injuries), rescue breathing, and support of circulation (chest compressions). Patients who exhibit respiratory distress and who require respiratory support are preferably intubated orotracheally, if it can be accomplished without excessive movement of the cervical spine. If **endotracheal intubation** cannot be performed rapidly and safely, a rescue airway may provide an alternative method of airway management.

Tension pneumothorax should be suspected in any major trauma patient, in particular those with obvious blunt or penetrating trauma to the chest. If there are clinical findings that support the presence of a tension pneumothorax (diminished breath sounds, usually on one side; JVD; asymmetric chest expansion; subcutaneous emphysema; tracheal deviation), perform a **needle thoracostomy**.

At least 2 large bore IV lines should be inserted, preferably in different extremities. Intravenous LR/NS should be infused rapidly as needed to maintain arterial pressure and perfusion, on the assumption that hypotension is due to hypovolemia unless there is evidence to the contrary in a severely injured accident victim.

Extensive, time-consuming care of trauma victims in the field is usually not warranted. However, there is evidence that the initiation of basic and advanced life support by paramedics for trauma cardiac arrest victims may improve rate of survival. The final decision whether to “load and go” or to begin definitive care prior to transport must be based on the unique characteristics of each incident.