Cardiac Arrest (Trauma) – 10.055

PURPOSE: Unwitnessed traumatic arrest is almost uniformly fatal while EMS witnessed arrest due to severe hypovolemia, hypoxia, or tension pneumothorax may respond to prehospital resuscitation. The purpose of this protocol is to determine when someone should have an attempt at resuscitation when in traumatic arrest.

DEFINITIONS:

A. Traumatic arrest: Loss of pulses and apnea secondary to trauma, not attributable to medical causes.
B. **HAT** Resuscitation: Treatable causes of witnessed traumatic arrest.

Hypovolemia:
- Control external bleeding
- If blunt trauma, apply pelvic binder/wrap
- Administer 1000 ml of Normal Saline or Lactated Ringers

Airway/Oxygenation:
- Ensure airway patency and effective oxygenation

Tension Pneumothorax:
- Perform bilateral needle chest decompression

PROCEDURE:

A. Trauma patients who are pulseless and apneic on EMS arrival are considered dead in the field per the Death and Dying protocol (50.025) unless there are extenuating circumstances (e.g. hypothermia, possible medical cause).
B. For patients found in VF or Pulseless VT on EMS arrival, suspect a medical event and treat per the VF/pulseless VT protocol.
C. For patients who deteriorate to PEA or asystole on scene, begin HAT resuscitation:
   1. If ROSC is obtained, transport.
   2. If ROSC is not achieved, you may declare the patient dead or contact OLMC for guidance.
D. For patients who arrest during transport, initiate HAT resuscitation and:
   1. If within 15 minutes of a trauma center, continue to the trauma center.
   2. If farther than 15 minutes to the trauma center, consider pulling over for crew safety and personnel resource reasons. If ROSC is not achieved, you may declare the patient dead or contact OLMC for guidance.

NOTES AND PRECAUTIONS:

A. If the mechanism of injury appears inconsistent with the patient's condition and not severe enough to induce traumatic arrest, consider a primary medical cause for the patient's cardiac arrest.
B. If there is concern for a medical cause of the arrest, transport to the nearest cath lab capable facility if ROSC is achieved. If the patient is still in presumed medical cardiac arrest, then transport to the closest facility.
C. Perform chest compressions in traumatic arrest, but DO NOT allow compressions to interfere with addressing the reversible causes of a traumatic arrest in the HAT resuscitation.
D. Post-ROSC cooling in the traumatic arrest patient should be deferred to the hospital.