



Protocol 700-C2: Traumatic Cardiac Arrest

New 11/01/22
Effective 11/01/22

BLS Treatment

- ❖ If Patient shows signs of obvious death, do not resuscitate (See Policy 613 *Determination of Death in the Field*)
- ❖ If non traumatic cardiac arrest is suspected as the cause of the traumatic event, treat the patient under Protocol 700-C1: Cardiac Arrest
- ❖ Apply Spinal Motion Restriction as indicated
- ❖ Address any areas of significant blood loss with hemorrhage control measures, regardless of any active bleeding or hemorrhage
 - Apply tourniquet(s) proximal to any large wound, laceration, or amputation of the extremities, regardless of any active bleeding or hemorrhage
- ❖ High quality uninterrupted CPR
- ❖ Mechanical CPR devices are prohibited on traumatic arrests
- ❖ Establish Airway (See Procedure 704: *Advanced Airway Management*)
- ❖ Apply AED and follow device instructions (BLS providers only)

ALS Treatment

- ❖ Place patient on cardiac monitor
 - Do not resuscitate if: (See Policy 613 *Determination of Death in the Field*)
 - asystolic on initial contact
 - PEA with rate < 40
- ❖ Establish Airway (See Procedure 704: *Advanced Airway Management*)
- ❖ EtCO₂ continuous numeric and waveform monitoring on every airway adjunct
- ❖ Vascular Access (IV) or (IO), (large bore, bilateral access preferred) wide open
- ❖ If Return of Spontaneous Circulation (ROSC) occurs after any intervention, titrate fluids to maintain a systolic blood pressure of ninety (90), obtain 12 Lead ECG (if it does not delay transport) and continue transport to trauma center, if possible.

Ventricular Fibrillation and Pulseless Ventricular Tachycardia

- ❖ Note: Epinephrine is not indicated in traumatic cardiac arrest
- ❖ Defibrillation at manufacturer's suggested values (example: 100, 150, 200 joules)
 - Starting with lowest energy setting
 - Each subsequent counter shock increasing in energy
- ❖ **Amiodarone** 300mg IV / IO if rhythm has not changed after a total of 3 defibrillations
- ❖ If after 5 minutes rhythm remains refractory:



- **Amiodarone** 150mg IV / IO, for a max cumulative dose of 450mg

Pulseless Electrical Activity and Witnessed Asystole

- ❖ Note: Epinephrine is not indicated in traumatic cardiac arrest
- ❖ Identify and treat any reversible causes:
 - **Hypovolemia:** Reassess any hemorrhage control interventions to ensure they are adequately addressing blood loss and reapply if necessary. Consider a rapid **Normal saline** 500ml fluid infusion.
 - **Hypoxia:** Ensure that the patient is adequately ventilated
 - Ensure proper chest rise and fall
 - Reassess any sucking chest wounds or flail segment interventions
 - Reassess endotracheal tube position for dislodgment, occlusion or mainstem bronchus location
 - **Hypothermia:** Consider rewarming measures
 - Patients that are hypothermic can be unresponsive to pharmaceutical therapy and electrical therapy
 - **Tension Pneumothorax:** If tension pneumothorax is suspected or the patient has a traumatic injury to the chest, perform bilateral pleural decompression if not already completed.
- ❖ Treat any rhythm changes according to correct treatment protocol
 - Asystole or PEA < 40 bpm: consider discontinuing resuscitation (See Policy 613 *Determination of Death in the Field*)
- ❖ Initiate Transport to appropriate receiving trauma center if possible, all remaining care to be completed en route to trauma center (Policy 625: *Trauma Transport and Destination*)