



Cardiac Arrest: Trauma

Assessment

Pediatric Pearls:

- Use pediatric dosing of medications or electrical therapy for a pediatric patient < 37 kg and as defined by the PEDIA Tape.
- Focus on rapid and early BLS airway and ventilation tools. Intubation may not be the best option for these patients.
- Pediatric pads should be used in children < 10 Kg or PEDIA tape color purple.

Signs & Symptoms:

- Traumatic Mechanism
- Apnea
- Pulseless
- PEA

Differential:

- Medical Cardiac Arrest
- Exsanguination
- Tension Pneumothorax
- Pelvic fracture(s)
- Hypoventilation
- Hypovolemia
- Hemorrhage
- Toxins
- Tamponade

Clinical Management Options

P	P	P	P	P	P	<ul style="list-style-type: none"> • Place tourniquets prior to or concurrent with CPR for major hemorrhagic injuries as indicated. • Pelvic Binder if blunt trauma involving the abdomen/pelvis. • Perform Pit Crew CPR for Trauma with basic airway management until ALS (\geqPL5) arrives, then pause CPR as necessary for correctable traumatic causes of death. • Co-manage with Trauma Care Guideline & Cardiac Arrest Guidelines. • Pull all extremities out to anatomical length/position.
L	L	L	L	L	L	<ul style="list-style-type: none"> • 4-lead ECG placement • EtCO₂
1	2	3	4	5	6	<ul style="list-style-type: none"> • Vascular access with Isotonic Crystalloid bolus until ROSC or up to 1 liter • Needle Decompression • Tranexamic Acid (TXA) • Simple Thoracostomies • Ultrasound: EFAST and/or Cardiac Motion
						<ul style="list-style-type: none"> • Administer Blood Product and Calcium Chloride

Consult Online Medical Control As Needed

Pearls:

- Refer to drug formulary charts for all medication dosing for both adults and pediatric patients.
- Emphasis is to be placed on correcting traumatic causes of death (hemorrhage control, application of pelvic binder, ventilation, decompression of the chest, reduction of grossly deformed extremities, volume resuscitation, etc.) prior to or concurrent with initiating CPR.
- Chest decompression should not be delayed for any other medical procedure or intervention to be accomplished, including CPR.
- CPR should be paused during Simple Thoracostomy to minimize risk of provider injury.
- Traumatic arrest patients with short downtime and close proximity to an appropriate trauma facility can be considered for transport after reasonable life saving interventions are first performed.
- In multi-patient events, traumatic arrests should not receive intervention until there are sufficient responders present to meet the needs of the living patients.
 - Except for lightning strikes, then perform reverse triage by giving higher priority to cardiac/respiratory arrests.