

4 Cardiac Arrest – Asystole / PEA

Asystole

PEA



Non-shockable pulseless cardiac arrest

START

- 1 **Call for help and a code cart/defibrillator**
 - ▶ **Ask:** “Who will be the crisis manager?”
 - ▶ **Say:** “The top priority is high-quality CPR”
- 2 **Put backboard under patient, supine position**
- 3 **Turn FiO₂ to 100%, turn off volatile anesthetics**
- 4 **Start CPR and assessment cycle...**
 - ▶ **Perform CPR**
 - “Hard and fast” about 100 compressions/min
 - Ensure full chest recoil with minimal interruptions
 - 8 breaths/minute, do not over ventilate
 - ▶ **Give epinephrine**
 - Repeat epinephrine every 3 – 5 minutes
 - Can give vasopressin to replace 1st or 2nd dose of epinephrine
 - ▶ **Assess every 2 minutes**
 - Change CPR compression provider
 - Check rhythm; if rhythm organized check pulse
 - If: Asystole/PEA continues:
 - Resume CPR and assessment cycle (restart Step 4)
 - Read aloud Hs & Ts (see list in right column)
 - If: VF/VT
 - Resume CPR
 - Go to ▷ CHKLST 5
 - Call Code Team if resources inadequate 662 -2345

DRUG DOSES and treatments

Epinephrine: 1 mg IV, repeat every 3 – 5 mins.
 Vasopressin: 40 U IV can replace 1st or 2nd dose of epinephrine

TOXIN treatment

Local anesthetic:

- Intralipid 1.5 mL/kg IV bolus
- Repeat 1 – 2 times for persistent asystole
- Start infusion 0.25 – 0.5 mL/kg/min for 30 – 60 minutes for refractory hypotension

Beta-Blocker: Glucagon 2 – 4 mg IV push

HYPERKALEMIA treatment

1. Calcium gluconate • 30 mg/kg IV
 -or-
 Calcium chloride • 10 mg/kg IV
2. Insulin • 10 units regular IV with
 1 – 2 amps D50W as needed
3. Sodium bicarbonate if pH < 7.2 • 1 – 2 mEq/kg slow IV push dosing.

Hs & Ts

- Hydrogen Ion (acidosis)
- Hyperkalemia
- Hypothermia
- Hypovolemia
- Hypoxia
 - Go to ▷ CHKLST 10
- Tamponade (cardiac)
- Tension pneumothax
 - Go to ▷ CHKLST 19
- Thrombosis (pulmonary)
 - Pulmonary Embolism, Go to ▷ CHKLST 21
- Thrombosis (coronary)
 - Myocardial Ischemia, Go to ▷ CHKLST 16
- Toxin (local anesthetic, beta blocker, calcium channel blocker)
 - Local Anesthetic Toxicity, Go to ▷ CHKLST 15

During CPR

Airway: Bag-mask sufficient (if ventilation adequate)
 Circulation:

- Confirm adequate IV or IO access
- Consider IV fluids wide open

 Assign roles: Chest compressions, Airway, Vascular access, Documentation, Code cart, Time keeping