Cardiac Arrest – Asystole/PEA

Non-shockable pulseless cardiac arrest

1. Call for help and a code cart
   - 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 overventilate
   - 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

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
Calcium channel blocker: Calcium chloride 1 g IV

HYPERKALEMIA treatment

1. Calcium gluconate or Calcium chloride
   • 30 mg/kg IV
   • 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

Hs & Ts

- Hydrogen ion (acidosis)
- Hyperkalemia
- Hypothermia
- Hypovolemia
- Hypoxia
- Tamponade (cardiac)
- Tension pneumothax
- Thrombosis (coronary/pulmonary)
- Toxin (local anesthetic, beta blocker, calcium channel blocker)

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