

PULSELESS ELECTRICAL ACTIVITY (PEA) / CARDIOPULMONARY ARREST

BLS ACTION/TREATMENT:

Initiate Cardiopulmonary Arrest Procedures

- Stabilize:
 1. ABCs → Assure Airway is Open / Ventilate with BVM and oxygen / CPR.
 2. Apply AED (Provide 2 minutes of CPR prior to initial shock if unwitnessed arrest).
- Assessment:
 1. Check for pulse and spontaneous respiration.
 2. Determine if there are signs of trauma or injury.
- History:
 1. Document time of onset of cardiac arrest or if arrest was un-witnessed, when was patient last seen.
 2. Document if bystander CPR being performed upon BLS arrival.
 3. Document medical problems (particularly diabetes or renal dialysis) and medications. Document use by patient of own medications immediately prior to or during BLS arrival.

ALS ACTION/TREATMENT:

- Monitor cardiac rhythm and document with rhythm strip.
- IV access, rate titrated to perfusion. Fluid bolus if narrow complex QRS or as indicated by potentially correctable cause*.
 - * Correctable causes of PEA:
 - Hypovolemia - most common cause
 - Hypoxia
 - Tension pneumothorax
 - Metabolic causes:
 - Hyperkalemia
 - Hypoglycemia
 - Hypothermia
 - Severe acidosis
 - Trauma
 - Drug OD
- Epinephrine: 1 mg 1:10,000 IVP/IO every 3 - 5 minutes.
ET: Epinephrine 1:1000 10 mg once.
- Atropine: HR < 60: 1 mg IVP/IO every 3 - 5 minutes to a maximum 3 mg.
ET: 2 mg once (if IV becomes established, atropine 2 mg ET = 1 mg IV).

Pediatric: (Use Length Based Resuscitation Tape to determine child's weight)

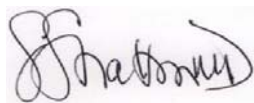
- Fluid bolus 20 mL/kg - reassess - may repeat twice.
- Epinephrine: 1:10,000 0.01 mg/kg IVP/IO every 3 - 5 minutes.

For non-perfusing bradycardia (rate < 60 and no brachial pulse) in a child, epinephrine in the above dose is the preferred first line medication.

Boxed text indicates BH order

Unboxed text indicates standing order

Approved:



TxGuide:Cardiac: C-20
Implementation Date: 3/16/09

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NOTES:

- PEA includes pulseless electrical rhythms (otherwise known as electromechanical dissociation or organized electrical activity without palpable pulse) such as pulseless sinus rhythm, idioventricular rhythm, ventricular escape rhythm, bradyasystolic rhythm.
- Pulseless or cardiac arrest patients with rapid tachycardias (usually over 160/min) may require electrical conversion of the tachycardia before other treatment of PEA.

Base Physician may order:

- Sodium bicarbonate only in prolonged arrest, known renal failure or tricyclic overdose in adult and pediatric patients: 1 mEq/kg IVP/IO, then 0.5 mEq/kg IVP/IO every 10 minutes.

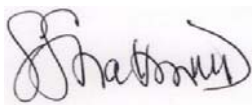
Base Physician may order:

- Dextrose 50% if history of diabetes and on insulin or oral hypoglycemic medication.
Pediatric patients: 1 mL/kg Dextrose 50% IVP/IO (if less than 2 years-old, Dextrose 25% 2 mL/kg IVP/IO).

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