Pulseless Electrical Activity (PEA)

**History**
- SAMPLE
- Medications
- Events leading to arrest
- End stage renal disease
- Estimated downtime
- Suspected hypothermia
- Suspected overdose
- Tricyclics
- Digitalis
- Beta blockers
- Calcium channel blockers
- Advanced Directives

**Signs and Symptoms**
- Pulseless
- Apneic
- Electrical activity on ECG
- No heart tones on auscultation or doppler

**Differential**
- Hypovolemia (Trauma, AAA, other)
- Cardiac tamponade
- Hypothermia
- Drug overdose (Tricyclics, Digitalis, Beta blockers, Calcium channel blockers)
- Massive myocardial infarction
- Hypoxia
- Tension pneumothorax
- Pulmonary embolus
- Acidosis
- Hyperkalemia

**AT ANY TIME**
Return of Spontaneous Circulation
Go to Post Resuscitation Protocol

**CONSIDER**
Administering Calcium and/or Sodium Bicarb
**PRN**

**Cardiac Arrest Protocol**
- Cardiac Monitor
- CPR per AHA Guidelines
- Airway Protocol
- IV Protocol
- Epinephrine IV/IO (1mg) repeat every 3-5 minutes
- Vasopressin IV/IO (40u) replace 1st or 2nd dose of Epi

**Consider early in all PEA pts:**
- 20ml/kg fluid bolus
- Dextrose 50% IV/IO (25g)
- Naloxone IV/IO (2mg)
- Glucagon IM (1u)
- Dopamine IV/IO (2-20mcg/kg/min)

**Criteria for Discontinuation?**
- Yes
  - Discontinue Resuscitation
  - Consider Epinephrine Drip

**Pearls**
- Recommended Exam: Mental Status
- Consider each possible cause listed in the differential: Survival is based on identifying and correcting the cause!
- Discussion with Medical Control can be a valuable tool in developing a differential diagnosis and identifying possible treatment options.

Protocol 24
This protocol has approved by the Survival Flight Medical Director as of April 2014 2014