Cardiac Arrest (ACLS)
8/20/2017

**Hard, fast, unrelenting chest compressions are the core of ACLS**

1) **No pulse** => start compressions and ventilations
   - 30:2 (adult); 15:2 (kid); continuous (intubated)

2) **Determine if rhythm is shockable or non-shockable**

3) **Start a timer for 2 minutes** -> do q2min rhythm check +/- something else

4) Shockable: v-fib and pulseless v-tach - > **shock once, then alternate epinephrine (epi) and amiodarone (amio) until two administrations of amio, then just do epi** (which probably decreases in efficacy after about 3 doses).

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Shock  ⇔  Shock + Epi  ⇔  Shock + Amio  ⇔  Shock + Epi  ⇔  Shock + Amio  ⇔  Shock + Epi
```

5) Non-shockable: asystole and pulseless electrical activity (PEA): **give epi immediately and every four minutes (every second cycle)**:

```
Epi  ⇔  Nothing  ⇔  Epi  ⇔  Nothing  ⇔  Epi  ⇔  Nothing
```

Quick Facts:

- V-tach/v-fib have decent prognosis, probably secondary to MI and these can be managed with heart cath
- Asystole has bad prognosis
- PEA kind of depends we can identify the cause.
  - If it’s a wide QRS consider bicarb/CaCl
  - If it’s a narrow QRS consider cardiac ultrasound to look for obstructive shock
- The 5 H’s and 5 T’s: hypoxia, hypovolemia, hypothermia, hydrogen ions, hyper/hypokalemia,; tension pneumothorax, tamponade, toxins, thrombosis (MI/PE)