

# CAP Cardiac Arrest – Pregnancy

## Cardiac arrest in the pregnant patient

### Start

1. Call for “Anesthesiologist, Obstetrician and Neonatal Team STAT”, a **CODE BLUE, Code Cart, and a Scalpel/Cesarean Pack**
  - ▶ Say: “The top priority is high-quality, uninterrupted CPR”
  - ▶ Say: “Plan for possible emergency delivery by 4 minutes”
  - ▶ Say: “Aim for fetal delivery by 5 minutes”
2. Put backboard under patient, supine position, manual left uterine displacement
3. Secure the airway (intubate, supraglottic airway), but do not delay chest compressions – Anticipate difficult airway
4. Confirm IV access above the diaphragm
  - ▶ Assess for hypovolemia and give fluid bolus as appropriate
  - ▶ If Hemorrhage: Go to » CHKLST HEM or PPHEM
  - ▶ If patient was on IV MgSO4 pre-arrest, give Calcium chloride 1g IV -or- Calcium gluconate 3g IV
5. Remove fetal monitors
6. Start CPR - Defibrillation - Assessment cycle: Place AED pads front & back
  - ▶ Perform CPR
    - Hard and Fast”; 100 compressions/min
    - Ensure full chest recoil with minimal interruptions (ETCO<sub>2</sub> > 10, DBP > 20)
    - 8 breaths / minute, do not over ventilate
  - ▶ If PEA/Asystole: Go to » CHKLST CAA
  - ▶ Defibrillate (if appropriate)
    - Shock at highest setting
    - Resume CPR immediately after shock
    - If VF/VT: Go to » CHKLST CAV
7. Continue all resuscitation (CPR, ACLS during and after C-Section)

#### DEFIBRILLATOR instructions

1. Place electrodes on chest
2. Turn defibrillator ON, set to DEFIB mode, and increase ENERGY LEVEL to 200 J (120 J or 150 J for smaller stature; 360 J for monophasic)
3. Deliver shock: press CHARGE then press SHOCK

### DRUG DOSES and treatments

<b>EPI</b> nephrine	1 mg IV, repeat every 3 - 5 minutes
<b>ANTIARRHYTHMICS</b>	
Amiodarone	1 <sup>st</sup> dose: 300 mg IV, 2 <sup>nd</sup> dose 150 mg IV -
or-	
Lidocaine	1 <sup>st</sup> dose: 1-1.5mg/kg IV, 2 <sup>nd</sup> dose 0.5-0.75mg/kg IV
<b>Magnesium</b>	1 to 2g IV for Torsades de Pointes
<b>TOXIN treatment</b>	
<b>Local anesthetic:</b>	Intralipid Go to » CHKLST LST
<b>Beta-blocker:</b>	Glucagon 2-4 mg IV push
<b>Calcium Channel Blocker or Hyperkalemia</b>	Calcium Chloride 1g IV

### Potential Contributors to Maternal Cardiac Arrest

- Anesthetic (high neuraxial block, loss of airway, aspiration, respiratory depression, LAST)
- Bleeding (DIC, Uterine Atony, Placenta abruptio/previa)
- Cardiovascular (CM, MI, dissection, arrhythmia)
- Drugs (anaphylaxis, illicit, drug error, magnesium, opioid, insulin, oxytocin)
- Embolic (PE, AFE, air)
- Fever (Infection, Sepsis)
- Hs and Ts (see below)
- Hypertension (eclampsia, HELLP, intracranial bleed)

### Hs & Ts (possible causes)

<b>Hypovolemia</b>	<b>Trauma (hemorrhage)</b>
<b>Hypoxia</b>	<b>Thrombosis (coronary/PE)</b>
<b>Hydrogen ion (acidosis)</b>	<b>Tension pneumothorax</b>
<b>Hyper/ Hypokalemia</b>	<b>Tamponade (cardiac)</b>
<b>Hypothermia</b>	<b>Toxins (local anesthetic, beta blockers, calcium channel blockers)</b>
<b>Hypoglycemia</b>	

### During CPR

<b>Airway:</b>	Bag-mask sufficient (if ventilation adequate) Consider advanced airway
<b>Circulation:</b>	Confirm adequate IV or IO access Consider IV fluids wide open
<b>Assign Roles:</b>	Chest compressions, Airway, Vascular access, Documentation, Code cart, Time keeping