CARDIAC ARREST IN PREGNANCY

PRESENTING COMPLAINT: Arrest
FINDINGS

- A  Check airway, Consider early intubation if unable to ventilate with bag mask
- B  Bag-mask ventilation with 100% oxygen
- C  Loss of pulse; Chest compressions in the left lateral decubitus position
- D  Unconscious
- E  Variable depending on the etiology
- \( U_{PC} \) variable, abnormal fetal heart rate
- \( L_{PC} \) hypoxia, academia, elevated lactic acid, electrolyte abnormalities

*V (verbal), P (pain), U (unconsciousness), D (delirious)

\( U_{PC} \) (point of care ultrasound) \( L_{PC} \) (point of care labs)

1) Causes: The approach to ACLS in nonpregnant patients has a strong focus on managing the complications of ischemic heart disease, particularly shockable ventricular arrhythmias. By contrast, obstetrical arrest usually has a nonarrhythmogenic cause
   - 5 Hs: Hypovolemia (Abruptio placentae, Placenta previa/ accreta/increta, Subcapsular hepatic hematoma, Ectopic pregnancy, Uterine rupture), Hypoxia, Hyperkalemia/hypermagnesemia/[H+] ↑ (acidosis), Hypoglycemia, Hypertension-related complications of eclampsia/preeclampsia
   - 4 Ts: Thrombosis/embolism (Pulmonary embolism, Myocardial infarction, Amniotic fluid embolism, Venous air embolism), Tension pneumothorax, Tamponade, Toxins/tablets (epidural anesthesia)

2) Management
   ● Same as non-obstetric patient
   ● Additional issues:
     ○ summon help immediately; call for an obstetrician, anaesthesiologist and neonatologist;
     ○ commence cardiopulmonary resuscitation according to advanced life support algorithms;
     ○ if gestation > 20 weeks, use a left lateral tilt (15 degree) to avoid aorto-caval compression; consider perimortem cesarean delivery if ongoing collapse after
approximately 4 hours of resuscitation despite left lateral tilt and or manual abdominal shift
○ A definitive airway should be secured as early as possible given the increased risk of aspiration;
○ establish large bore iv access above the diaphragm; initiate aggressive volume resuscitation unless suspicious of pre-eclampsia/eclampsia;
○ defibrillation and resuscitation drugs should be administered according to established algorithms;
○ prepare for perimortem caesarean section

3) REFERENCES & ACKNOWLEDGMENT
-European Society of Intensive Care Medicine, Obstetric critical care clinical problems 2013