

## 2. Maternal Cardiac Arrest Algorithm

**This clinical pathway is intended to supplement, rather than substitute for, professional judgment and may be changed depending upon a patient's individual needs. Failure to comply with this pathway does not represent a breach of the standard of care.**

**FIRST RESPONDER**

- **Activate Resuscitation Team** (if not already present) **AND OBGYN**
- Document time of onset of maternal cardiac arrest
- Place the patient supine and **perform a left uterine displacement (LUD)** with as below.

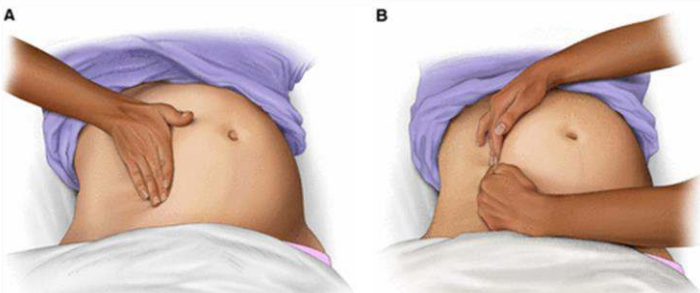


Diagram A shows a pregnant woman lying supine with her right arm bent and hand on her right hip. Diagram B shows a pregnant woman lying supine with her left arm bent and hand on her left hip, displacing the uterus to the left.

- Start resuscitation as per the **1. Adult Cardiac Arrest Algorithm**; place hands slightly higher on the sternum than usual

### SUBSEQUENT RESPONDERS

#### Maternal Interventions

**Treat as per 1. Adult Cardiac Arrest Algorithm**

- Do not delay defibrillation
- Give typical ACLS drugs and doses
- Ventilate with 100% oxygen
- Monitor wave form capnography and CPR quality
- Provide post-cardiac arrest care as appropriate. See **4. Post-Cardiac Arrest Care Algorithm**

#### Maternal Modifications

- Start IV access above the diaphragm
- Assess for hypovolaemia and give fluid bolus when required
- Anticipate difficult airway; experienced provider preferred for advanced airway placement
- If patient receiving IV/IO magnesium prearrest, stop magnesium and give IV/IO calcium chloride 10mL in 10% solution, or calcium gluconate 30 mL in 10% solution
- Continue all maternal resuscitative interventions (CPR, positioning, defibrillation, drugs, and fluids) during and after caesarean section

#### Obstetric Interventions for Patient with an Obviously Gravid Uterus\*

- Perform manual uterine displacement (LUD) – displace uterus to the patient's left to relieve aortocaval compression
- Remove both internal and external foetal monitors if present

**Obstetric and neonatal teams should immediately prepare for possible emergency caesarean section**

- If no ROSC by **4 minutes** of resuscitative efforts, consider performing immediate emergency caesarean section
- Aim for delivery within **5 minutes** of onset of resuscitative efforts

\*An obviously gravid uterus is a uterus that is deemed clinically to be sufficiently large to cause aortocaval compression

### Search for and Treat Possible Contributing Factors (BEAU-CHOPS)

Bleeding/DIC

Embolism: coronary/pulmonary/amniotic fluid embolism

Anaesthetic complications

Uterine atony

Cardiac disease (MI/ischaemia/aortic dissection/cardiomyopathy)

Hypertension/preeclampsia/eclampsia

Other: differential diagnosis of standard ACLS guidelines

Placenta abruption/previa

Sepsis