EMERGENCY ACTION CARD

retrieve
Adult Critical Care Transfer Service

Obstetrics: Maternal Cardiac Arrest

v1.2

Use this EAC alongside the Cardiac Arrest EAC. Emergency hysterotomy should be performed within 5 minutes of collapse.

START: IMMEDIATELY NOTIFY DRIVER, STOP SAFELY

❶ Immediate actions

- Commence CPR using standard hand position
- If >20/40 (or uterus palpable above umbilicus): manually displace uterus to patient's left
- Apply pads in standard position and defibrillate as necessary (Box B)
- Note time
- Ask driver to call 999 and assist with CPR

❷ Adequate oxygen delivery

- Give 100% oxygen

❸ Airway and breathing

- Own airway: insert i-gel or intubate
- ETT/trache: confirm position
- Ensure ventilator function adequate or manually ventilate with Mapleson C system (Water's system)
- Use waveform capnography in all patients

❹ Circulation

- Ensure patency of IV access, consider IO
- Administer cardiac arrest drugs as indicated (Box C)
- Continue CPR as required (rotate personnel as able)

❺ Evaluate potential causes and act accordingly

- 4Hs / 4Ts / specific problems (Box D in Cardiac Arrest EAC)
- Consider ALS-compliant echo

❻ Perform emergency hysterotomy (Box D) within 5 minutes of collapse IF SKILLS AND RESOURCES ALLOW (see SOP notes)

❼ Next steps

- Patient **will require anaesthesia** if ROSC achieved
- Consider arterial blood gas, uterotonic drugs, TXA
- Uterine tamponade/sutures, manual aortic compression
- Key Basic Plan
- Inform receiving hospital Central Delivery Suite and obstetrician

Box A: CRITICAL CHANGES

- If problem worsens significantly, or a new problem arises, go back to of Key Basic Plan
- If Transfer Practitioner or Transfer Doctor transfer, contact Remote Duty Consultant
- Consider contacting receiving hospital obstetric consultant or Leadership SPOC for support, if required

Box B: DEFIBRILLATION (use standard pad position and energy)

- ZOLL X-Series automatically gives 120J then increments through 150J and 200J for subsequent shocks

Box C: DRUGS FOR CARDIAC ARREST

- Adrenaline 1mg (post-ROSC increments 10-100mcg)
- Amiodarone 300mg (after 3rd shock) and 150mg (after 5th shock)
- Magnesium 2g for polymorphic VT/hypomagnesaemia
- Calcium chloride 10ml 10% for hypocalcaemia or hyperkalaemia
- Fluid bolus 500ml

Box D: EMERGENCY HYSTEROTOMY

- Perform if ≥20/40 to improve maternal outcome and no ROSC at 4 minutes following cardiac arrest
- Make vertical incision from umbilicus to symphysis pubis through skin, subcutaneous fat, linea alba and peritoneum (note bladder lies over lower uterus)
- Make vertical incision in the midline in the upper segment of uterus. Extend upwards with scissors. Cut through placenta if in the way. Use fingers to stretch uterine incision
- Locate presenting part of baby (head, bottom, foot) and lift out of uterus. Do not pull on an arm. Use fundal pressure to aid delivery
- Apply 2 Spencer-Wells clamps to cord and cut immediately with scissors
- Hand baby to another team member (if available) to commence NLS
- Direct pressure to uterine incision edges if bleeding. Have one attempt to separate placenta; place in clinical waste bag
- Pack open abdomen with gauze
- Continue maternal resuscitation and follow point 7 if ROSC