

Overview of the scenario	Maternal cardiac arrest on the antenatal ward. PEA arrest secondary to pulmonary embolism
Learners	All staff working on the antenatal ward Multi-disciplinary obstetric team; obstetricians, midwives, anaesthetists, neonatal team. Cardiac arrest team members
Suggested clinical learning outcomes	Recognition of maternal collapse Call appropriate emergency response teams Initial assessment and management of maternal cardiac arrest (including manual uterine displacement) Timely performance of peri-mortem caesarean section (PMCS) Identification and exclusion of reversible causes Consideration of escalation of care including ECMO Treatment algorithm of thromboembolism
Suggested non-clinical learning outcomes	Software: Ensure up to date SOP for all aspects of management of collapsed obstetric patient. Ensure there is clarity of who to call and how to call them; this should include all required members of a maternal emergency response team (for both maternal and neonatal resuscitation) Ensure up to date SOP for thromboembolism treatment and antenatal thromboprophylaxis Cardiac arrest algorithms present on the cardiac arrest trolley Hardware: Emergency buzzer system working. Bed able to lie in rapid supine position Cardiac arrest trolley stocked and easily available; this should also include a scalpel for PMCS Other equipment available including ultrasound machine to aid with identification and exclusion of reversible causes PPE available and considered (Covid-19 unknown cases) Environment: Is there enough space around the bed space for the whole MDT team? Where will the neonate be resuscitated? How to protect neighbouring women from the witnessing the CPR and potential exposure to AGP. Teamworking: Management of cardiac arrest needs a cohesive MDT.

	<p>Ensure there is clear leadership at all times Leader to avoid task fixation but needs to keep overview Clear concise delegation of tasks Closed loop communication by all the team members Good handover on arrival of new team members Scribe Use of checklists where available Regular situational report to share mental model with team and encourage suggests from team Following the stabilisation of the patient a team debrief should ensue.</p>
Scenario	<p>39 year old, P1, 41 weeks with BMI 43. Admitted to the antenatal ward for commencement of induction of labour. She has had her first prostin. She takes no regular medication (if asked she refused antenatal LMWH)</p> <p>She is found collapsed in bed, unresponsive by the healthcare support worker who was due to take her routine observations. Initial assessment: no respiratory effort, no pulse, no signs of life. Initial rhythm is PEA. Timely PMCS is required She remains in PEA until she receives treatment for her PE If US is performed, she has a grossly dilated RV with empty LV</p>
Debrief topics Following your simulation, consider how you will disseminate crucial learning points with the wider MDT.	<p>Were all the right team members present? Was it easy to contact the people you needed? Was there any equipment that you wanted that was not available?</p> <p>Discussion re treatment of PE following PMCS (bleeding risk / availability of percutaneous intervention) Was the PMCS performed in a timely manner? If you had this case again, is there anything that you would do differently?</p>