

Overview of the scenario	Maternal tachyarrhythmia on delivery suite whilst in labour
Learners	All staff working on delivery suite Multi-disciplinary obstetric team; obstetricians, midwives, anaesthetists, neonatal team Cardiology team members Peri-arrest response team
Suggested clinical learning outcomes	Recognition of maternal tachyarrhythmia Call appropriate help Initial assessment and management of maternal tachyarrhythmia (including vagal manoeuvres and initial pharmacological interventions as per ALS algorithm) Identification and exclusion of reversible causes Management once patient develops haemodynamic instability (with appropriate sedation, analgesia and DC cardioversion)
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) and cardiology team Arrhythmia algorithms present on the cardiac arrest trolley Hardware: Cardiac arrest trolley stocked and easily available; ECG leads should be available on the defibrillator Drugs required in date and available Full monitoring is available in the location that the patient is being treated in Environment: Consider where it is best to manage this case: on delivery suite, in theatre, in recovery? Teamworking: Management of a maternal collapse needs a cohesive MDT. Ensure there is clear leadership at all times Ensure clear communication across the whole team who need to be involved with the care including obstetric MDT, theatre team and cardiology. 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 ALS tachyarrhythmia checklist

	<p>Regular situational report to share mental model with team and encourage suggests from team</p> <p>Following the stabilisation of the patient a team debrief should ensue.</p>
Scenario	<p>32 year old, Po, 37 weeks with BMI 25 spontaneously labouring on delivery suite. 6cm dilated and normal. Entonox for analgesia. She has a past history of structural heart disease with a VSD repair and mild mitral valve regurgitation.</p> <p>Well during pregnancy with no regular medication.</p> <p>She suddenly complains of feeling like her heart is racing. ECG shows narrow complex tachycardia (it is not sinus!)</p> <p>Unresponsive to vagal manoeuvres, adenosine and betablockers. Cardiology called and attend (try to include cardiology in your simulation)</p> <p>Patient then complains of chest pain, breathlessness and BP falls. DC cardioversion is required.</p>
<p>Debrief topics</p> <p>Following your simulation, consider how you will disseminate crucial learning points with the wider MDT.</p>	<p>Were all the right team members present?</p> <p>Was it easy to contact the people you needed?</p> <p>Were there any drugs / equipment that you wanted that was not available?</p> <p>Discussion re treatment of tachyarrhythmias</p> <p>How confident is the team with rhythm recognition?</p> <p>If you had this case again, is there anything that you would do differently?</p>