

<b>Name:</b>	C James	<b>Observation at start</b>	<b>CRT:</b>	2s	
<b>D.O.B.:</b>	23/07 (52Y)	<b>RR:</b>	Ventilated	<b>Temp:</b>	36.4
<b>Address:</b>	(Insert local address)	<b>ETCO2:</b>	3.8	<b>BM:</b>	6.3
		<b>Sats:</b>	92%	<b>Weight:</b>	83Kg
<b>Hospital ID:</b>	445 952 5141	<b>Heart Rate:</b>	110	<b>Allergy</b>	NKDA
<b>Ward:</b>	Orthopaedics	<b>BP:</b>	102/72		
<b>Background to scenario</b>		<b>Specific set up</b>			
A patient undergoing an ankle ORIF under GA and popliteal block has an episode of cardiovascular instability (either anaphylaxis to skin prep by the surgeon or local anaesthetic toxicity)		Mannequin, cannulated Ventilated on ETT Anaesthetic chart and remaining induction drugs Surgical prep tray open Anaphylaxis/LAST treatment available (out of sight)			
<b>Required embedded faculty/actors</b>		<b>Required participants</b>			
Anaesthetist Surgeon ODP +/- theatre staff		Anaesthetic on call team (Theatre staff/ODP in MDT sim)			
<b>Past Medical History</b>					
Asthma, usually well controlled (salbutamol only, rarely used), no hospital or ICU admission No previous anaesthetics, no airway concerns. Injury while playing sports Has just had an IV general anaesthetic and popliteal block by a trainee and transferred into theatre and set on the ventilator.					
<b>Drugs Home</b>			<b>Drugs Hospital</b>		
Salbutamol (rarely used)			Paracetamol and ibuprofen Induction drugs of choice Antibiotics as per local protocol		
<b>Brief to participants</b>					
You are the on call anaesthetic team, you hear an alert for anaesthetic assistance to theatre X					
<b>Scenario Direction</b>					
<b>Stage 1, 0– 5 minutes (if anaphylaxis)</b>					
<b>A</b>	Intubated				
<b>B</b>	As per ventilator settings, ETCO2 3.8, high pressure alarms, wheeze on auscultation (only if listened)				
<b>C</b>	HR 110 (increase to 135), BOP 102/72 (decrease to 65/23) (can arrest if adrenaline not administered in timely manner)				
<b>DE</b>	Anaesthetised on volatile/TIVA (as per local preference) Surgeon has just prepped surgical site with chlorhexidine but not communicated this Rash under chlorhex prep- difficult to see Anaesthetist is adamant this is local anaesthetic toxicity as anaesthetic drugs given a little while ago and blocks just performed				
<b>Rx</b>	Assessment of situation, gaining handover, role allocation and declaration of event Identification of critical incident, calling for help Identification of cause, administration of treatment Management of anaesthetic in critical incident				
<b>Stage 2, 5–10 minutes (if local anaesthetic toxicity)</b>					
<b>A</b>	Intubated				
<b>B</b>	As per ventilator settings, ETCO2 3.8				
<b>C</b>	HR 110 (increase to 126 with ectopics), BP 102/72 (decrease to 85/35) (can arrest if not identified)				
<b>DE</b>	Anaesthetised on volatile/TIVA The anaesthetist is adamant this is anaphylaxis as multiple drugs administered prior to transfer into theatre and will treat unless stopped				
<b>Rx</b>	Assessment of situation, gaining handover, role allocation and declaration of event Identification of critical incident, calling for help Identification of cause, administration of treatment Management of anaesthetic in critical incident				

<b>Stage 3, 10– 15 minutes Recovery</b>	
<b>AB</b>	Intubated and ventilated, airway pressures normalised
<b>C</b>	Cardiovascular parameters normalised
<b>DE</b>	Anaesthetised with volatile/TIVA
<b>Rx</b>	Discussions with MDT around proceeding with surgery – Ankle ORIF, planning for ongoing care Discussion around investigations and ongoing management – allergy testing/MHRA notification Discussion around updating parents Discussion about escalating concerns/stop the line/debriefing after event
<b>Guidelines</b>	
Emergency treatment of anaphylaxis <a href="https://www.resus.org.uk/sites/default/files/2021-05/Emergency%20Treatment%20of%20Anaphylaxis%20May%202021_0.pdf">https://www.resus.org.uk/sites/default/files/2021-05/Emergency%20Treatment%20of%20Anaphylaxis%20May%202021_0.pdf</a> Management of severe local anaesthetic toxicity <a href="https://anaesthetists.org/Home/Resources-publications/Guidelines/Management-of-severe-local-anaesthetic-toxicity">https://anaesthetists.org/Home/Resources-publications/Guidelines/Management-of-severe-local-anaesthetic-toxicity</a> Association of Anaesthetists QRH handbook <a href="https://anaesthetists.org/Home/Resources-publications/Safety-alerts/Anaesthesia-emergencies/Quick-Reference-Handbook">https://anaesthetists.org/Home/Resources-publications/Safety-alerts/Anaesthesia-emergencies/Quick-Reference-Handbook</a>	
<b>Guidance for Patient Role</b>	
Opening lines/questions/cues/key responses Anaesthetised	Relevant HPC / PMH
Concerns	Actions
<b>Guidance for ODP role</b>	<b>Guidance for theatre staff/surgeons</b>
Opening lines/questions/cues/responses/Concerns Competent, but does not anticipate needs If participants do not think of alternative diagnoses, highlight symptoms/signs that might not have been picked up or suggest correct diagnosis without letting scenario progress too long down the 'wrong' path	Conversing/noisy unless critical incident declared Competent in own role If participants do not think of alternative diagnoses, highlight symptoms/signs that might not have been picked up or suggest correct diagnosis without letting scenario progress too long down the 'wrong' path
<b>Guidance for anaesthetic trainee in theatre</b>	<b>Guidance for senior anaesthetic support</b>
Expectations/actions Convinced of the wrong diagnosis and act on this If participants consider alternative diagnoses, be open to these	Support in-person or via phone call depending on level of participants
<b>Additional challenges</b>	
Confidence of ODP/other staff Noise levels in theatre Seniority of anaesthetist in theatre	
<b>Session Objectives</b>	
<b>Clinical</b>	Management of local anaesthetic toxicity Management of Anaphylaxis
<b>Non-technical skills</b>	
<b>Teamworking</b>	Coordinating team activities, exchange of information with team, assertiveness
<b>Task management</b>	Planning, prioritising, following guidelines, identifying and utilising resources
<b>Situational awareness</b>	Gathering information, recognising and understanding critical incident
<b>Decision making</b>	Identifying options and balancing to make decisions, continuous re-evaluation

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