

Airway Simulation Module – A4.1B Challenging situations (Paeds) [7/9/2012]

Subject Topic	EdWISE PROGRAM - OUTLINE OF AIRWAY SIMULATION MODULE
Framework Profile	Programme: EdWISE
	Module A4.1: Case management
Associated E-Learning	
tutorials	
Simulation learning objectives	Preparation and equipment drill for challenging airways
	Specific problems likely to be encountered in paediatric patients
	Situations when there is a potential for failed intubation with RSI
	Case management: Difficult intubation in paediatrics
Target Group	All
Delivery method	Brief power point and facilitated discussion.
	Two immersive scenarios utilising the high fidelity mannequin and faculty actor
Timeframe	60 mins







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Resource	C tor c	ACCIAN

Projector screen & computer

Video conference unit

Paediatric mannequin

Oropharyngeal airway X3 sizes

Nasopharyngeal airways X2 sizes

Stethescope

Oxygen masks – nasal prongs, Hudson, NRB

Bag valve mask

Intubation equipment – X2 laryngoscopes, ETT sizes 7.0 – 8.0, stylet, bougie, lubricant, CO2 monitor, C Mac if available?!

LMA, scalpel, skin retractors, Melker kit,

Suction Yanker

IV cannula and normal saline X2 1000ml bags with giving sets, also available EZIO

Drugs and labels midazolam 10mg in 10 mls, diazepam 10mg in 10mls, suxemethonium, thiopentone, rocuronium, propofol, ketamine, metaraminol, adrenaline, morphine, mannitol

Defibrillation trolley

Syringes drawing up needles





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Session Structure - EdWISE PROGRAM - AIRWAY SIMULATION MODULE A4.1

Timing	Welcome and Introduction	Resource
5 mins	Welcome and Introduction	Video conferencing unit
	Provide Housekeeping – Fire Exits, mobile phones on vibrate	Enough seats for the participants
	 Provide a summary of what the workshop will involve and the expectations from the participants 	and arranged in a horseshoe
	Introduce yourselves - facilitation team, host team and participants. Include experience of cardiac	facing the VC unit and camera.
	patients	Led by the team over VC but with
	If this is not the first module run on that day, the participants are the same and this has been covered	host team supplying information
	previously, then this section can be missed out.	on the fire exits/toilets/etc.
Timing	Main Topic Presentation	
15 mins	PowerPoint presentation about specific situations where airway management can be challenging,	PowerPoint presentation
	importance of being prepared with equipment and drills, effective teamwork and specific problems that	
	might occur. The differences encountered in paediatric airways	









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Timing	Familiarisation to Mannequin & equipment		
5 mins	Introduce students to mannequin & capabilities	Local faculty to	
		familiarise the students	
		to the environment/	
		mannequin/actors. Can	
		use the familiarisation	
		video, to guide the local	
		faculty, if needed.	
Timing	Simulation – Scenario 1		
8 mins	Participant Briefing		
	BAT call		
	5 year old drowning		
	Assisted ventilation		
	Saturations 89%		
	Heart rate 95bpm		
	Temperature 34 degrees		
	GCS 3		
	Scenario outline		
	Jason is a 5 year old boy, visiting his grandparents from England, found unconscious in the backyard swimming pool. He was last seen 3 minutes		
	earlier playing with a ball. Resuscitation was initiated immediately and by the time the ambulance arrived he had return of s	pontaneous circulation,	
	though his breathing is ineffective and he remains hypoxic.		
	On arrival his breathing is supported by bag valve mask with saturations of 89%. His temperature is 34 degrees, heart rate 95bpm and GCS 3.		
	He will need to be intubated with a systematic approach and rewarming instituted along with supportive care with disposition	on to a paediatric ICU.	









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Timing	Debrief – Scenario 1
7 mins	Debrief – choose only 2 points from the list below
	Structured approach
	Management of drowned child
	Imminent need for intubation and ventilation to manage a drowned child
	Disposition of the child to a paeds ICU / NETS
	Communication within the team, leadership
	Involvement of parents in the resuscitation room
Timing	Simulation – Scenario 1
8 mins	Participant Briefing
	Tim Finn
	4 year old boy, awaiting admission to the paediatric ward with pneumonia.
	The RMO managing the patient requesting review as Tim has become less responsive.
	Scenario outline
	4 year old boy, awaiting bed in paediatric ward for management of fever secondary to pneumonia. He has been in the ED for 2 hours and has
	received IVABs, but no fluid bolus and has been becoming increasingly unwell during his stay. This has not been recognised by the junior staff
	looking after him.
	Increasing respiratory effort with decreasing level of responsiveness.
	Sats 90% on 6 L Oxygen, RR 35, HR 140, BP 75/45.
	Needs management of ensuring IV Antibiotics, IV fluid bolus and management of the airway with intubation





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Timing	Debrief – Scenario 1	
7 mins	Address 3 points	
	Treatment of sepsis in children	
	Intubation and RSI-incl drugs	
	Appropriate inotropic support Organise and prepare for transfer	
	Anticipate and plan A/B	
	Communication within team and with parent.	
	Leadership and call for senior help	
	Distribute workload and utilising all available resources	
Timing	Summary	
5 mins	Paediatric Airway management should be rehearsed regularly	
	Weight based sizes and doses can be quickly found in charts and tables	
	Oxygenation can be achieved through adequate positioning and adjuncts	
	Preparation and Planning are paramount to rapid sequence induction	
	Thank the hosts and the SCSSC teams	







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