Septic Baby

Paediatric Simulation

Name:	S Allen	**Observation at start**		**CRT:**	6 secs
D.O.B.	01/03 (1Y)	**RR:**	48	**Temp:**	39.2
Address:	(Insert local address)	**ETCO2:**	-	**BM:**	4
		Sats:	97% on A	**Weight:**	7Kg
Hospital ID:	4352687921	**Heart Rate:**	195	**Allergy**	NKDA
Ward:	ED Resus	**BP:**	Not reading		

Background to scenario	Specific set up
A 1 year old with suspected bacterial meningitis presents to ED in a DGH. They have a high respiratory rate and low GCS requiring intubation and preparation for transfer.	Baby mannequin, cannulated Other equipment available in local ED (anaesthetic machine/ventilator/drugs/paperwork) Capillary blood gas result – poor
Required embedded faculty/actors	**Required participants**
Parent ED/paediatric doctor ODP	Anaesthetist ODP can be participant in MDT sim Paediatric/ED in MDT sim – start on arrival to ED

Past Medical History

Previously well, term baby, normal birth, uncomplicated. No developmental concerns so far.
Arrived in ED 5 minutes ago via paramedics, unwell for days, fever, vomiting, not feeding well + non-blanching rash

Drugs Home	Drugs Hospital
Paracetamol Vaccinations up to date	Nil yet

Brief to participants

You have been called to ED resus to review and support management of an unwell child.
Handover from ED/Paeds – unwell for 3 days, fever, vomiting, not feeding. Now looks drowsy and lethargic, high RR and pulse, BP not recording. Bulging anterior fontanelle and a non blanching rash. Please secure airway for low GCS and respiratory distress. Calling tertiary paediatric centre for support and transfer

Scenario Direction

Stage 1, 0– 5 minutes Assessment and preparation	
A	Drowsy, becoming unresponsive, becomes quiet if participants do not progress to intubation
B	RR 48, sats 92% despite oxygen therapy, signs of respiratory distress
C	HR 195, BP initially not recording, If participants ensure BP prior to intubation this can be given 50/20 Unresponsive to initial fluid resuscitation Difficulty cannulation can add to the challenge – lead to consider IO access
DE	Increasingly drowsy Non-blanching rash, bulging fontanelles Can have background noise playing to depict ED environment and distractions – see youtube
Rx	Assessment of situation and available resources, call for help early Fluid resuscitation, antibiotics – MDT management Consider diagnosis and investigations Preparation for intubation and transfer including decision of appropriate location for management (transfer to theatre vs manage in resus) Communication with parent
Stage 2, 5–10 minutes - Intubation	
AB	Requires intubation
CD	Observations respond to resuscitation and intubation
DE	The scenario ends when the child is intubated and prepared for transfer
Rx	Intubation – preparation and planning, appropriate drug/ETT choice, consideration of ongoing ventilation and sedation Preparation for transfer – using local protocols

Guidelines	
BJA Ed Sepsis in Paediatrics	
Guidance for Parent Role	
Opening lines/questions/cues/key responses Are they going to be ok?	Relevant HPC / PMH
Concerns Did we bring them in too late? Anxious and upset	Actions Wants to be with the child
Guidance for ODP role	**Guidance for other roles**
Competent, but needs prompting	
Guidance for Anaesthetic senior/consultant	**Guidance for other role**
Depending on level of trainee, consultant is at home and will come in, but continue with intubation as child sounds critically ill. Advice can be given over the phone if needed	

Session Objectives	
Clinical	Treatment of sepsis in a young child Intubation of critically ill patient Management of tasks in non-theatre environment
Non-technical skills	
Teamworking	MDT working, exchanging information and using capabilities of the team
Task management	Planning and preparing for procedure, decision making regarding place of safety
Situational awareness	Gathering information, using sources of information for support, anticipating next steps
Decision making	Assessing situation and making decisions regarding resuscitation and airway management, continuous re-evaluation