

1. Lead examiner

Candidate No:

2. Co-examiner

Total Mark:

SCENARIO

You are working in a regional hospital ED. You receive a call from ambulance that a 4 year-old boy is *en route* after an apparent near-drowning accident in a family swimming pool.

CPR is in progress. Estimated time of arrival is 10 mins.

Question 1: Describe your preparations (1 minute)

Expected Response	Details & Comments	
Environment	Prepare resus bay; ensure adequate ambient temp Family room free	
Equipment PROMPT: What weight would you estimate for this child	Airway / Breathing: 500 ml BVM, appropriate size face mask, small/straight laryngoscope blade Mac 2, small Yankauer sucker, ETT= (age/4)+4 = 5 Circulation: IO devices accessible Overhead heater or warming pad Drugs and Fluids Estimated weight is 16 kg using 2(age+4)	
Personnel PROMPT: What staff would you want to have?	ED resus team – assume leadership, assign roles Paediatrician PICU or ICU if available or paed anaesthetist Social Worker/Pastoral Care Remove redundant staff	

Question 2: The child arrives and is in PEA with a ventricular rate of 50. He is not intubated and has no IV access. Describe your actions. (2-3 minutes)

Expected Response	Details & Comments	
Airway PROMPT: Are there any other precautions?	Supportive measures Emergent endotracheal intubation C spine immobilisation	
Establish effective CPR PROMPT: What rate and ratio would you use	Rate of 15:2, compression rate 100/minute.	
Circulatory access PROMPT- what are your essential bloods test?	Immediate circulatory access needed Options- Peripheral access/IO/Central line Can give drugs ET if necessary Estimated weight is 16 kg using 2(age+4) Crystalloid for fluid bolus 20mls/kg = 320 mls Blood tests- glucose , venous gas/electrolytes	
Drugs PROMPT- for dose if not already provided	Adrenaline every 3-5 minutes Drugs: Adrenaline dosage: 10mcg/kg = 0.16 mg/160mcg/1.6ml of 1:10000 Glucose, +/-Bicarbonate (only recommended in prolonged arrest at 1-2 mmol/kg)	
Reversible causes: PROMPT: what causes are most likely in this child?	Hypothermia, hypoxia , hypovolaemia, tension PTX, electrolyte disturbance	

Question 3: The family wish to come in to resus with the child. What are the advantages and disadvantages for their presence during the resus? (1 minute)

Pros	Cons	
Allows parents to see that everything possible is being done May help grieving if unsuccessful	Requires nurse or other support person Plus requires more effort to keep them informed Adverse reactions Staff uncomfortable with idea; degradation in performance Can be tricky if there are child protection issues	

Question 4: You achieve a Return of Spontaneous Circulation. What are the key elements of post resuscitation care? (2 minutes)

Expected Response	Details & Comments	
Airway	Check tube position Reassess vital signs	
Breathing PROMPT: What are the ventilation settings?	100% oxygen (avoid hyperventilation) Ventilate at 12-16 breaths/min initially, V_T 7-10 mls/kg, PEEP advisable given drowning Monitor E_tCO_2	
Circulation	Fluids for hypovolaemia May need a pressor via central line (preferred route groin in this child)	
Secondary	Gastric tube and catheter Sedate / paralyse. Cool vs don't rewarm CXR, ECG, basic bloods Detailed history: ?imaging with trauma in mind	
Transfer	Will need transfer to specialist centre	
Non-clinical PROMPT: What are the non-clinical aspects of care?	Care of NOK-Support, inform, counsel Refer to ancillary services (eg social work) if required Communication-Thorough documentation Follow up communications, eg referrals and updates to receiving services Care of Staff De-brief Evaluate (at later date)	

Comments: (if you fail the candidate, please state why)

If the candidate fails the exam overall, what feedback would you suggest CIC provide for this SCE?

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