

1. Lead examiner

Candidate Number:

2. Co-examiner

Final Mark:

SCENARIO

You are the consultant in a busy rural emergency department, when one of the junior doctors presents a case of an 18 month old boy with 24 hours of vomiting and diarrhoea. The parents report that he vomits every time he is given anything orally.

He has a temperature of 37.9°C; a pulse of 140/min. He appears alert and responsive to his surroundings. You evaluate the patient as a viral gastro-enteritis with mild to moderate dehydration.

Question 1: Describe your treatment.

Expected Response	Details & Comments	1.5 Minutes
Implications for Treatment	Methods of oral hydration; pros/cons of oral/NG or IV fluids, choice of fluid • Trial oral rehydration fluid • Observation • +/- anti-emetics • Failure of oral = NG (?IV – but don't require details of fluids) Role of anti-emetic? Fever management	Fluids & anti-emetics for pass (Prompt; what other measures would you consider?)

Question 2: Outline your criteria for safe discharge and your discharge instructions.

Expected Response	Details & Comments	1.5 Minutes
Successful TOF	Vitals within normal range, happy interactive child, social circumstances adequate, parents have transport & can return if necessary, time of day	Bold to pass. (Prompt; any other considerations?)
Address parental concerns	Reassurance/Education: Majority of gastro self-limiting – oral hydration key – frequent low volume oral hydration fluid	
When to return	Return criteria (Bilious vomiting, bloody/mucousy diarrhoea, distress or lethargy), failure to tolerate fluids, high fever, abdominal pain, parental concern	
Planned Follow-up	Within the next 24 hours	

Question 3: Two days later the child is brought back to the ED. He has bloody diarrhoea and no wet nappies in the last 24 hours. He is pale and poorly responsive with a pulse of 180/min with a temperature of 39³. Describe your actions now.

Expected Response	Details & Comments	2 Minutes
Resuscitation	Team approach with paediatric help, O ₂ , IV Access (I/O). Drugs and fluids based on est. weight ~ 12kg Appropriate fluid (N/Saline) and volume – 20ml/kg boluses and reassess Check BSL and treat if low (2ml/kg 10% dextrose) Consider Antibiotics Fever management	Bold to pass (Display an understanding of each topic)
Rehydration	Weight based formula + maintenance to account for ongoing losses	
Investigations	Electrolytes and renal function, FBC (bloody stool/fever/rule out anaemia), VBG (incl Lactate), LFTs. U/A & urine culture. Stool and blood cultures. ECG	
Supportive care	Non-invasive monitoring, urine output	
Parental support		

Question 4: Investigations show the following:

Reference

Full Blood Count	Hb	83	g/L	(115-165)
	WCC	18.1	$\times 10^9 / L$	(3.5-11)
	Plt	25	$\times 10^9 / L$	(150-450)
Urea / Electrolytes	Na	142	mmol / L	(136-146)
	K	5.9	mmol / L	(3.5-5.0)
	Urea	15	mmol / L	(2.0-6.0)
	Creatinine	75	mcmol / L	(20-50)

Interpret these results and outline your further management

Expected Response	Details & Comments	2 Minutes
Interpretation	Anaemia, leucocytosis, thrombocytopenia, ARF with hyper-K	<i>Prompt: apart from sepsis what other causes can you think of?</i> Bold to pass
Differential	HUS, sepsis	
Cause	Shiga toxin Classic <i>E.coli</i> 0157:H7,	
Further management	Ongoing fluid resuscitation + maintenance ("Monitoring") of hyper-K ⁺ Consider parenteral antibiotics IDC – monitor U/O	
Disposition	D/W paediatrician Need to transfer to tertiary paed facility	
Parental support		

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?**