CLINICAL REASONING CHECKLIST - HYPOVOLAEMIA

Students receive one point for every item on the checklist performed correctly and in the proper sequence. They receive a score of zero for any item not performed, performed out of sequence or performed incorrectly.

Scenario: An 76 year old man, day 1 post-op following a bowel resection, with hypovolaemia and dehydration

Process	Description	Behaviour	✓	Comments
Considers the patient situation	Observes context and patient situation	*Verbalises key observations from handover and initial view of patient:* 1. Patient's age 2. Recent surgery 3. Previous fluid challenges 4. PCA 5. Patient's restlessness 6. Other relevant observation/s		
Collect cues/ information	Reviews current information (e.g. handover reports, patient history, patient charts, results of investigations and nursing/medical assessments previously undertaken)	*Reviews:* 1. Temp 2. HR 3. RR 4. BP 5. O_2 sats 6. Urine output 7. IV rate 8. FBC – cumulative balance 9. Medical notes		

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		10. Nursing notes 11. Pathology results		
	Gathers new information (e.g. undertake patient assessment)	*Assesses:* 1. Asks patient how they are feeling 2. HR 3. BP 4. RR 5. Temp 6. O_2 saturation 7. PCA 8. Catheter drainage 9. Oral mucosa/tongue 10. Thirst 11. Cognitive status 12. O_2 flow rate 13. Pain 14. BGL 15. Condition of wound 16. Other		
	Recalls knowledge (e.g. physiology, pathophysiology, pharmacology, epidemiology, therapeutics, culture, context of care, ethics, law etc)	*Verbalises:* 1. BP is related to fluid status 2. Third space fluid shifts can result in decreased intravascular volume 3. Post-operatively confusion in older patients can result from ... 4. Older patients can have renal insufficiency The 5. Morphine can cause vasodilation and reduce urine output 6. Dehydration and hypovolaemia commonly happen post op but can be serious 7. Older patients are at increased risk of fluid imbalance		

Process information	Interprets: analyse data to come to an understanding of signs or symptoms. Compare normal Vs abnormal.	*Verbalises:* 1. HR high 2. BP low 3. RR normal 4. O_2 saturation normal 5. Urine output low 6. Oral mucosa/tongue – dry, tongue furrowed 7. Thirst extreme 8. Cognitive status anxious 9. Cumulative balance positive 10. O_2 flow rate 2L min 11. BGL normal		
	Discriminates: distinguish relevant from irrelevant information; recognise inconsistencies, narrow down the information to what is most important and recognise gaps in cues collected.	*Identifies and verbalises:* 1. HR high 2. BP low 3. Urine output low 4. Cognitive status anxious 5. Cumulative fluid balance shows positive balance 6. Other relevant information		
	Relates: discover new relationships or patterns; cluster cues together to identify relationships between them.	*Verbalises:* 1. Hypotension and tachycardia can result from decreased intravascular volume 2. Bowel preps can cause hypovolaemia 3. A decreased urine output can indicate hypovolaemia and dehydration 4. Other relevant clinical pattern/s 5. Decreased intravascular volume can cause anxiousness and confusion		
	Infers: make deductions or form opinions that follow logically by interpreting subjective and objective cues; consider alternatives and consequences.	*Verbalises:* 1. The patient's cognitive changes may be the result of hypovolaemia and hypoxia 2. The patient anxiousness may be because of dehydration		

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	Matches current situation to past situations or current patient to past patients (usually an expert thought process)	*Verbalises:* 1. I have seen this before when ...		
	Predicts an outcome (usually an expert thought process)	*Verbalises:* 1. If we don't get an order for a fluid challenge the patient's condition will deteriorate 2. The patient could have acute renal failure, hyovolaemia shock and death		
Identify problem / issue	Synthesises facts and inferences to make a definitive diagnosis of the patient's problem.	*Verbalises:* 1. The patient is hypovolaemic and dehydrated		
Establish goals	Describes what you want to happen, a desired outcome, a time frame.	*Verbalises:* 1. Normotensive within 30mins 2. Improved vital signs within 60 mins 3. Increased urine output within 15 mins 4. Decreased anxiety within 120 mins 5. Improved BP, HR within 60 mins		
Take action	Selects a course of action between different alternatives available	*Initiates:* 1. Monitor O_2 sats 2. Phone MO using ISBAR 3. Obtain order for fluid challenge 4. Reduce IV rate 5. Monitor vital signs 6. Monitor urine output 7. Raise foot of bed		
Evaluate	Evaluates the effectiveness of outcomes and actions. Ask: "has *the situation improved now*?"	*Reviews:* 1. O_2 sats 2. Urine output 3. BP		

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		4. HR 5. Cognitive status		
Reflect on process and new learning	Contemplates what you have learnt from this process and what you could have done differently.	*For debriefing:* Next time I would … I should have … If I had … I now understand …		