

OSCE

Candidate information

You have been asked to do an ad hoc case-based discussion with a junior Registrar. The Registrar recently had an overdose case and has some questions regarding the case. The department is under control and you have made time to discuss the case with them and answer any questions they have.

Domain	%
Medical expertise	50
Prioritisation and decision making	
Communication	
Teamwork and collaboration	
Leadership and management	
Health advocacy	
Scholarship and teaching	50
Professionalism	

Actor (Registrar) information

You have made time to talk with your consultant about a recent overdose you were managed. The case involved a 60 year old male who took a deliberate overdose of mogadon (a benzodiazepine) and amitriptyline (a TCA).

Summary of case:

- No medical issues except depression; no regular meds
- Found in his shed by family, surrounded by pill packets
- Took 80 tablets of 10mg amitriptyline and several doses of mogadon 2 hours prior to family finding him
- Unsure if other co-ingestants
- Presented obtunded with GCS 12/15 and mild hypotension
- Initial ECG normal

Prompts:

- What is the mechanism of toxicity with TCAs?
 - o Anticholinergic effect – agitation, gastric slowing
 - o Sedation/coma tend to precede cardiotoxicity
 - o Main concern is effect on Na channels – cardiotoxic
 - o Hypotension, broad-complex tachydysrhythmia then bradycardia (the latter pre-arrest)
- How should they be managed?
 - o 10mg/kg potentially life-threatening overdose
 - o Sodium bicarbonate is antidote – 100mmol bolus if unstable. 1-2 meQ/kg if QRS >100ms. If giving >6mmol/kg of sodium bicarbonate, call clinical toxicologist.
 - o Intralipid may be indicated
 - o VA-ECMO
 - o If intubated, hyperventilate to pH 7.5-7.55
- What are the clinical endpoints?
 - o QRS <140ms
 - o pH 7.5 to 7.55
 - o Max Na of 155mmol/L
- What tests should be ordered?
 - o ECG: QRS widening >100ms and right axis deviation of terminal QRS
 - o VBG: pH (TCA can cause metabolic acidosis)
 - o Standard overdose screen – paracetamol etc

Marking:

	Mark
Identifies TCA overdose with features of toxicity	2
Good understanding of toxicity and management priorities	2
Identifies need to seek and treat co-ingestants	1
Names at least two endpoints to aim for in treatment (e.g. QRS, pH)	1
Knows antidote including dose and indication for giving (sodium bicarbonate)	2
Recognises need to prophylactically treat and intubate patient (risk of deterioration)	1
Approach to Registrar – collegial, concise, organised	1