



Cabrini Practice OSCE 5

Candidate instructions:

This station is a **Clinical Examination Standardised Case-Based Discussion**. You will be interacting directly with an Examiner. You will be asked to outline your assessment and management to the following clinical situation. Further information will be provided as the case evolves. The examiner will be assessing your medical knowledge as well as your reasoning and rationale to your approach and decisions. Please be as specific as possible when answering. For example, when discussing drugs, describe your dosage regimen and the reasons why you chose that regimen, as opposed to other regimens.

Case information:

You are in charge of a tertiary metropolitan ED during a weekday shift.

You are managing a 24 year old male who weights 70kg. He is 5 hours post ingestion of:

- 20 x 40mg Citalopram
- 5 x 50mg Tramadol
- 3000mg Paracetamol
- 200mls of vodka

He has been brought to ED by his girlfriend.

His initial Vital signs are:

Temp	38.2 degrees
HR	120
BP	170/90
RR	22
O2 sats	99% on room air
GCS	14 - confused

There are no covid concerns with this patient.

Domains examined:

Medical Expertise	- Clinical Examination	50%
	- Management	30%
Prioritization and Decision Making		30%



Examiner instructions:

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Stage 1 (0-3:30mins): 'Describe the clinical examination you would perform on this patient and detail what specific clinical findings you are looking for and why.'

- Airway - ensure patent, if compromised left lateral position, suction, airway manoeuvres, Guedel/NPA, intubation
- Breathing – auscultate lungs-assess for aspiration
- Circulation- asses for shock,
- Disability- febrile - ? sepsis ? serotonergic syndrome

-Focus on Serotonergic Syndrome Clinical examination findings:

TABLE 2.8.1 Clinical features of serotonin syndrome		
Mental status changes	Autonomic stimulation	Neuromuscular excitation
Apprehension Anxiety Agitation, psychomotor acceleration and delirium* Confusion	Diarrhoea* Flushing Hypertension Hyperthermia† Mydriasis* Sweating* Tachycardia*	Clonus (esp. ocular and ankle)* Hyperreflexia* Increased tone (lower limbs > upper limbs)* Myoclonus* Rigidity Tremor
*Clinical features significantly associated with diagnosis (Hunter Serotonin Toxicity Criteria). †Hyperthermia >38°C is not significantly associated with the diagnosis but is present in severe cases.		

Require ≥ 5 features and ≥ 1 from each column.

- Screen for sepsis – chest(aspiration)/abdo/skin/CNS
- Screen for physical injuries/self-harm

Stage 2(3:30-4mins): 'Your clinical examination findings are:

Vital signs: (hand to candidate)

Temp 39.1 degrees
HR 140
BP 190/100
RR 24
O2 sats 100% on room air
GCS 13 – more confused

He is sweaty, confused and agitated.

Chest is clear, CVS exam normal

Abdo SNT

No rash or neck stiffness

Neurological examination- limited by conscious stage - hyper-reflexia and clonus, otherwise normal'

'What is your likely diagnosis?'

Serotonergic Syndrome

Stage 3(4-7mins): *'How would you manage this patient?'***R** esuscitation – resus bay, full monitoring, assemble team**A**irway/**B**reathing - O₂, ensure patent given altered mental state, if compromised left lateral position, suction, airway manoeuvres, Guedel/NPA, intubation may be required for temp control**C**irculation – iv access x 2, **Cooled IVF bolus** 500mls N/Saline aim HR < 100**R** isk assessment - High risk severe Serotonergic syndrome**S** upportive care and monitoring

- IV **Diazepam** 5-10mg over 3-5 mins to achieve gentle sedation, rpt as needed, accept other Benzo's
- Can tritrate IV vasodilator (GTN, sodium nitroprusside) for refractory tachycardia/HT
- High risk seizures due to citalopram > 600mg ingested - Benzodiazepines eg Midazolam eg IV Midazolam 5-10mg (0.15kg/kg), Diazepam 5-10mg iv, Clonazepam 1-2mg iv, Lorazepam 4mg iv
- **Active cooling** – remove clothes, water spray, fans, ice packs, cold IVF, lavage-bladder/gastric, intubation and paralysis
- Thiamine

I nvestigations—12-lead ECG + cardiac monitoring (>8hrs) for risk QT prolongation from Citalopram, paracetamol, blood glucose level (BGL)**D** econtamination - too late for activated charcoal, also risk aspiration**E** nhanced elimination – not applicable**A** ntidotes – usually not required, efficacy not established in controlled trials (would usually consult toxicologist)

- Cyproheptadine 8mg oral/NGT, can rot 8 hourly for 24 hours
- Olanzapine 5-10 mg SL
- Chlorpromazine 25-100mg in 100ml N/Saline over 30-60mins

D isposition – ICU/HDU, Toxicology consult, general medicine, psychiatry



New Vital Signs:

Temp	39.1 degrees
HR	140
BP	190/100
RR	24
O2 sats	100% on room air
GCS	13 – more confused

He is sweaty, confused and agitated.

Chest is clear, CVS exam normal

Abdo SNT

No rash or neck stiffness

Neurological examination- limited by conscious stage - hyper-reflexia and clonus, otherwise normal

Examiner Marking Sheet

COMPONENT ASSESSMENT

For each Domain below, select the ONE best option that best represents the candidate's level of performance. The option "**minimum level of competency displayed**" represents the level of safe independent practice as a **junior FACEM** in Australasia

Very poor level of competency displayed	Well below minimum level of competency displayed	Below minimum level of competency displayed	Minimum level of competency displayed	Above minimum level of competency displayed	High level of competency displayed	Very high level of competency displayed
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Please rate ALL the following domains:

Medical Expertise Examination	☐	☐	☐	☐	☐	☐	☐
Management	☐	☐	☐	☐	☐	☐	☐
Prioritization and Decision Making	☐	☐	☐	☐	☐	☐	☐

Detailed assessment criteria

Please use the following criteria to inform your ratings above (mandatory items in ***bold italics***)

Medical Expertise: Examination:

- Airway - ensure patent, if compromised left lateral position, suction, airway manoeuvres, Guedel/NPA, intubation
- Breathing – auscultate lungs-assess for aspiration
- Circulation- asses for shock,
- Disability- febrile - ? sepsis ? serotonergic syndrome
- Focus on Serotonergic Syndrome Clinical examination findings:

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Require **>=5 features and one from each column.**

- Screen for **sepsis** – chest/abdo/skin/CNS
- Screen for physical injuries/self-harm
- Dx Serotonergic syndrome**

Management:

Resuscitation – resus bay, full monitoring, assemble team

Airway/**B**reathing - O₂, ensure patent given altered mental state, if compromised left lateral position, suction, airway manoeuvres, Guedel/NPA, intubation may be required for temp control

Circulation – iv access x 2, Cooled IVF bolus 500mls N/Saline aim HR < 100

Supportive care and monitoring

- IV **Diazepam** 5-10mg over 3-5 mins to achieve gentle sedation, rpt as needed
- Can tritrate IV vasodilator (GTN, sodium nitroprusside) for refractory tachycardia/HT
- High risk seizures due to citalopram > 600mg ingested - Benzodiazepines eg Midazolam eg IV Midazolam 5-10mg (0.15kg/kg), Diazepam 5-10mg iv, Clonazepam 1-2mg iv, Lorazepam 4mg iv
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Investigations—12-lead ECG + cardiac monitoring (>8hrs) for risk QT prolongation from Citalopram, paracetamol, blood glucose

Decontamination - too late for activated charcoal, also risk aspiration

Enhanced elimination – not applicable

Antidotes – usually not required, efficacy not established in controlled trials (would usually consult toxicologist)

- Cyproheptadine 8mg oral/NGT, can rot 8 hourly for 24 hours
- Olanzapine 5-10 mg SL
- Chlorpromazine 25-100mg in 100ml N/Saline over 30-60mins

Disposition – ICU/HDU, Toxicology consult, general medicine, psychiatry

Prioritization and Decision Making

Focused clinical examination seeking serotonergic syndrome

Identifies life-threatening **serotonergic syndrome**

Rapidly acts to **cool and administer benzodiazepines**

Structured approach to manage serotonergic syndrome

Station Summary: Clinical Examination SCBD Serotonergic Syndrome

GLOBAL RATING FOR STANDARD SETTING:

This scale is used in the standard setting process for the OSCE. Please rate the candidate's OVERALL performance in this OSCE. The rating should take into account the entirety of the OSCE, rather than just a sum average of the individual domain scores. This element MUST be completed for the standard of the examination to be set.

	Well Below Standard	Below Standard	Just at Standard	Above Standard	Well Above Standard
In terms of a safely practicing junior emergency physician , select the ONE option that best reflects the candidate's performance in this station:	☐	☐	☐	☐	☐

EXAMINER SIGNATURE:

Reference: Toxicology Handbook: 3rd Edition, Murray et al