

SAQ 1

A 32 yr old female with a history of bipolar disorder is brought in by ambulance after having taken her weeks worth of lithium. She is alert & orientated and complains of no systemic symptoms at this time.

1. List two early signs or symptoms that suggest a significant amount of Lithium has been ingested acutely. (2 marks)

2. What is the earliest and most frequent sign of neurological toxicity associated with Lithium ingestion. (1 mark)

3. List 2 laboratory tests that may impact on the management of this patient's acute Li overdose? Explain your reasoning in your answer. (4 marks)

4. List two treatments that may be considered for a patient suffering from acute Lithium toxicity and one possible indication for each. (4 marks)

A 32 yr old female with a history of bipolar disorder is brought in by ambulance after having taken her weeks worth of lithium. She is alert & orientated and complains of no systemic symptoms at this time.

List two early signs or symptoms that suggest a significant amount of Lithium has been ingested acutely & the earliest and most frequent sign of neurological toxicity associated with Lithium ingestion.

GI symptoms ie :

Nausea

Vomiting

Diarrhoea

Abdominal pain – occur with significant acute ingestion

Tremor is the earliest sign of neuro toxicity.

List 2 tests that may have an influence on further management of a patient presenting after an acute overdose of lithium & explain why they may be relevant.

AXR – may show concretions of tablets in the stomach, indicating need for aggressive GI decontamination.

U + E's - renal impairment may be an indicator of the need for dialysis.

Hypokalaemia can be a complication.

Serum Lithium level - to confirm ingestion, monitor progress & determine safety of medical discharge.

Also:

BSL - excludes hypo/hyper-glycaemia as alternative cause for altered mental status.

Paracetamol level - incase polypharmacy ingestion, since paracetamol OD is initially asymptomatic, but can -> hepatic toxicity, and there is an available antidote if used within the first 8 hrs after ingestion.

Alcohol - since often a co-ingestant & may be an alternative cause for altered mental status.

List two treatments that may be considered for a patient suffering from acute Lithium toxicity and one possible indication for each:

- Volume resuscitation with Normal saline (10-20ml/kg then reassess) – indicated for patients who are volume deplete after significant GI fluid loss & to maintain adequate urine output of > 1ml/kg/hr to ensure adequate Li elimination.
- Haemodialysis - primarily useful in those with significant renal impairment +/- or in those who present late with clinical features of lithium neurotoxicity.