

An Atypical Presentation of a Tricyclic Antidepressant Overdose Due to a Bezoar



Background

- Tricyclic antidepressants cause predominantly cardiovascular and neurologic toxicity
- Onset of symptoms is rapid in overdose, and is often seen within the first 1-2 hours

Hypothesis

- Pill bezoars can significantly alter onset and peak symptoms in overdose

Case

- A 53 yo male presented to the ED with altered mental status
- He was last seen at **2330** the night before
- At that time he had some vomiting, but was otherwise in his normal state of health
- His family found him altered at **0900**

Known medications:

Metformin	Prasugrel
Glyburide	Metoprolol
Aspirin	Lorazepam

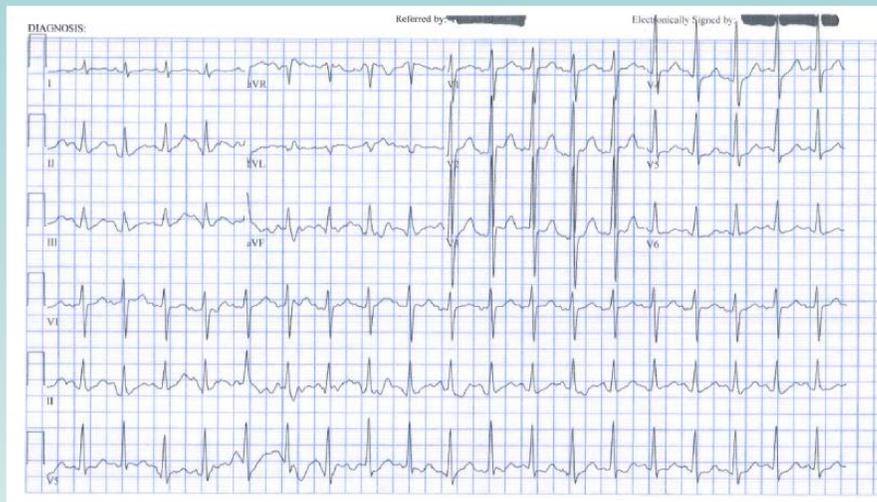
- On arrival to the ED at **1000** his GCS was 9

Eyes -	3
Verbal -	2
Motor -	4

- His vital signs were:

Temp –	36° C
HR –	116
BP –	126/80
RR –	22
O2 Sat –	97% on RA

Case



- His initial EKG is above
 - Sinus tachycardia with a rate of 118
 - QRS of 116 (unknown baseline)
- A trial of sodium bicarbonate was given without effect on his QRS
- The patient became more obtunded and was intubated at **1600**
- He had a generalized tonic-clonic seizure at **1630**, despite optimal ventilation
- The patient received a CT scan of his abdomen which revealed a large amount of hyperdense material resembling pills in the stomach
- The patient continued to have a prolonged QRS, with a peak of 138
- He was started on sodium bicarbonate therapy



Results

- Gastroenterology was consulted for endoscopic pill removal
- A pill bezoar was found, and removed endoscopically



Image 4



Image 6

- After his endoscopy, the patient was given a dose of activated charcoal and started on whole bowel irrigation to limit the toxicity of the remaining pills
- GC/MS was positive for clomipramine and norclomipramine
- Pill fragments were also identified as clomipramine by GC/MS
- His QRS remained prolonged until hospital day #9

Conclusion

- Pill bezoars can cause a delay in onset of significant toxicity after tricyclic antidepressant overdose
- Pill bezoars can result in prolonged toxicity of tricyclic antidepressants

