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

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

• 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

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

• 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