Endoscopic Management of Unintentional Glass Ingestion Complicated by Contained Gastric Perforation

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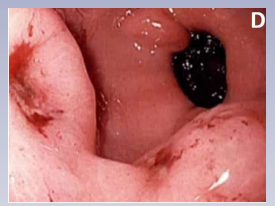
Introduction

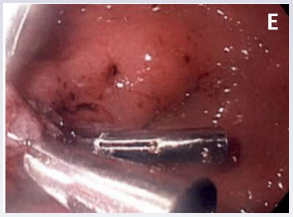
- Foreign body ingestions are a relatively rare occurrence in the adult population. We present a case of unintentional glass ingestion in a 34 year-old Male that was managed endoscopically.

Case

- A 34 year old man with no past medical or psychiatric history presented with 3 days of severe epigastric pain without associated symptoms including nausea, vomiting, diarrhea, hematemesis, hematochezia or melena.
- He denied sick contacts, travel, change in diet or ingestion of foreign objects.
- Laboratory work-up was unremarkable.
- CT of abdomen and pelvis with contrast was obtained and showed circumferential thickening of the distal stomach with a linear hyperdensity in the anterior aspect of the stomach of unknown origin, but was hypothesized to be an ingested object causing contained perforation (A).
- Gastroenterology and general surgery teams were consulted. Patient was made NPO, started on IV fluids, ceftriaxone, metronidazole and pantoprazole.
- Patient then underwent upper endoscopy that revealed a 3 cm shard of glass embedded in the anterior wall of the gastric antrum, as well as a second area of gastric wall defect where the we theorize the alternate side of glass had embedded (B-D).
- The shard of glass was removed from the wall of the stomach via biopsy forceps and retrieved via overtube and snare. The two areas of perforation were repaired with 4 hemoclips (E,F).
- A repeat CT with water soluble contrast was performed the following day and did not show any extravasation of contrast from the stomach.
- Patient had an uncomplicated post-procedural course. His diet was advanced sequentially to a general diet and he was discharged with oral antibiotics to complete a 5 day course.

Images





Discussion

- Foreign bodies are rare in the adult population, occurring in approximately 5 in 100,000 adult patients. Unintentional ingestions is responsible for 86% of these occurrences. Glass is a rare cause, accounting for approximately 4% of cases[1].
- Due to the rarity of these cases, there are no guideline recommendations to direct their management.
- Complications can include bleeding, perforation, abscess, and mediastinitis. Often these cases will require surgical intervention[2-4]. Due to the rarity of these cases, there is no data to suggest the rate at which surgical intervention is required.
- In our case perforation did occur. Fortunately however, this was able to be managed endoscopically with hemoclip placement and surgical intervention was avoided with an uncomplicated postprocedural course

Conclusion

- Glass ingestion is rare in the adult population, and there is a paucity of data on its management. We present a case that was able to successfully be managed endoscopically.

References

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