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Visual Case Discussion

Point-of-care ultrasound identification of ichthyoid gastric foreign body

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A normally healthy 34-year-old female presented for evaluation immediately after the ingestion of a foreign body as part of a dare from her friends. She had no acute complaints but was concerned about the identification of the object she had swallowed and next steps in management. Her vitals were stable on arrival and her physical examination was unremarkable. There was no abdominal tenderness, peritoneal signs, surgical scars, or hepato-splenomegaly. Her bowel sounds were normoactive. She was encouraged to drink 500 mL of water to facilitate point-of-care transabdominal gastric ultrasound. A mobile, ichthyic, 3 cm foreign body was identified in the distended fundus of the stomach on ultrasound.

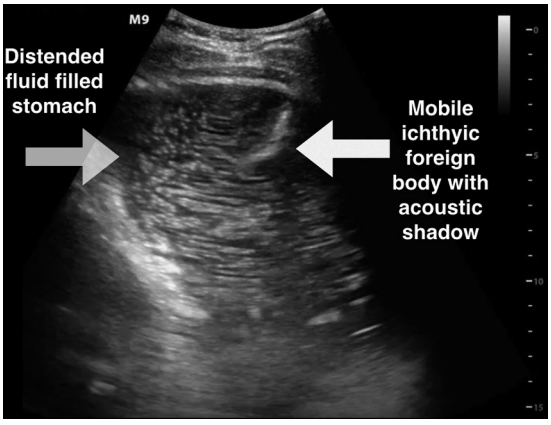

Fig. 1. Hypoechoic fluid filled stomach (opaque grey arrow) with a 3 cm linear hyperechoic foreign body (white arrow).

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.visj.2018.11.002.

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Questions

1. What had the patient consumed?
   a. Earth worm
   b. Frog
   c. Beetle
   d. Fish

2. What is the acute management of a stable patient after the identification of an ingested non-toxic foreign body located in the stomach?
   a. Bowel irrigation with polyethylene glycol solution to faciliate passing of the object
   b. GI consultation for emergent endoscopic removal
   c. Reassurance and supportive care with a plan for outpatient follow-up care
   d. Induction of vomiting with syrup of ipecac

Answers

1. Fish. Explanation: Point of care ultrasound can be utilized to help identify gastric foreign bodies. It can be helpful to provide the patient with extra liquid to help distend the stomach and provide a larger acoustic window. Based in the sized and carangiform locomotion of the object in the patient's stomach, it was believed that she had swallowed a live fish. References: Spina P. et al. Usefulness of ultrasonography in gastric foreign body retention. Pediatric Radiology. 2000;30:840; Salmon et al. Ingested foreign bodies: A case series demonstrating a novel application of point-of-care ultrasonography in children. Pediatric Emergency Care. 2013;29(7):870-873.

2. Reassurance and supportive care with a plan for outpatient follow-up care. Explanation: The goals of management for a patient after the ingestion of non-toxic and non-obstructive foreign bodies, that have passed the esophagus into the stomach, are reassurance an planning for close outpatient follow up. Radiopaque foreign bodies can be followed with serial radiographs if there is a concern that they may not pass the pylorus. Biologic foreign bodies are managed expectantly with careful instructions to return to the emergency department should they develop signs of gastric or intestinal obstruction.