

A Case of a Completely Migrated Gastric Toothpick Caught by EUS

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Introduction

- Foreign body ingestion is a common cause for medical emergencies.¹ Once they reach the stomach, roughly 80% of objects pass uneventfully through the GI tract
- Sharp objects, such as toothpicks, are more likely to cause injury throughout the GI tract. Toothpick ingestion is associated with high rates of mortality and morbidity, with an estimated 79% of ingestions leading to gut perforation²
- While most commonly affecting the duodenum, toothpicks have been found to cause perforation throughout the GI tract³
- Additional extraintestinal complications include septic arthritis, pericardial effusion, and bacterial meningitis⁴⁻⁶
- Endoscopy is warranted in roughly 20% of cases, with about 1% requiring surgical intervention⁷

Case Report

- A 63-year-old M PMHx HTN and diabetes presented with a 1-week history of encephalopathy, nausea, vomiting, decreased PO intake and several episodes of melena
- CT revealed a linear density extending from the lumen of the distal gastric antrum to the posterior wall of the stomach traversing the pancreas in the expected location of the SMV, with associated portal venous gas
- EGD revealed no evidence of foreign body, and no evidence of bleeding. Follow up MRI failed to demonstrate linear density
- Patient developed Actinomyces bacteremia 5 days into admission. He underwent dental extraction, was treated with antibiotics, and was discharged home in improved condition

Case Report

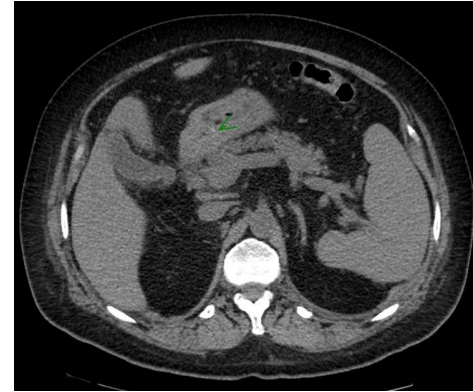


Figure 1: CT reveals linear density extending from the distal gastric antrum to the posterior wall of the stomach traversing the pancreas in the expected location of the SMV, with associated portal venous gas

Clinical Course

- Patient returned 6 weeks later with septic shock, found to have recurrent Actinomyces bacteremia
- CT re-demonstrated suspicious thin linear density as well as multiple liver abscesses. Again, EGD failed to reveal foreign body
- EUS was then performed, and the foreign body was localized to the antrum, 2.4 mm below the luminal surface
- Patient underwent exploratory laparotomy with the retrieval of a wooden toothpick, repair of gastric injury, and drainage of pyogenic liver abscesses
- He improved after surgery and was discharged in stable condition shortly thereafter

Discussion

- In patients with known foreign body ingestion, plain radiograph is often the go-to modality used to identify the object. CT may be obtained if perforation or abscess is suspected⁸
- In nearly all cases, subsequent endoscopy is successful in visualizing, locating, and retrieving the object if necessary
- This case was particularly unique given the degree of foreign body migration into the gastric wall, causing difficulty in diagnosis though EGD
- This case showcases the use of EUS to locate this enigmatic extraluminal foreign body, not characterized on MRI, and not seen on multiple EGDs

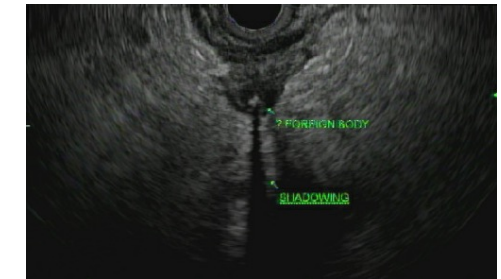


Figure 2: EUS identification of extraluminal foreign body with associated shadowing, 2.4 mm below luminal surface of gastric antrum

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