


Foreign body ingestion: A case of wine-cork ingestion due to chronic alcoholism leading to ileus

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Eren Tobcu¹ , Haldun Özcan², Erdal Karavaş¹ and Bilgin Topçu³

Abstract

Ingestion of foreign bodies is a rare clinical problem in healthy adults. Less than 1% of cases need surgery due to perforation or obstruction. Here, we describe an unusual case of a wine-cork ingestion by a 54-year-old woman with a history of chronic alcohol consumption. Computed tomography (CT) of the abdomen and pelvis revealed foreign body (FB) in terminal ileum. The proximal part of the ileum was dilated due to obstruction. Laparotomy was performed, and the FB was removed without complications. Most ingested FBs spontaneously pass through the gastrointestinal tract. However, in rare instances, the FB can cause obstruction. In case of suspicion of serious complications such as obstruction and perforation, abdominopelvic CT should be used. The application of radiographic techniques in the identification of FBs and the assessment of potential complications plays a crucial role in expediting medical interventions for patients.

Keywords

foreign body, ingestion, ileus

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Introduction

The ingestion of foreign bodies (FBs) is a health concern that carries significant potential risks.¹ Most of the FBs ingested can pass on their own. Pre-endoscopic studies have demonstrated that 80% or more of FBs are likely to pass without intervention.² 10%–20% must be removed endoscopically, and less than 1% require surgery due to obstruction or perforation.³ Intentional ingestion has been found to lead to higher intervention rates, with some studies reporting rates as high as 76% and 28% of patients undergo surgical intervention [1]. 80% of FB ingestions occur in infants, most frequently between the ages of 6 months and 3 years.^{4,5} In adults, FB ingestion is uncommon compared to children, and the majority of adult cases are food-related.

However, 30% of the patients may be asymptomatic for up to years; clinical symptoms can be acute and include chest pain, dysphagia, pharyngeal discomfort, epigastric

pain, and vomiting.^{1,6} Clinical findings and therapeutic strategies for FBs are diverse and determined on the specific anatomical region in which the FB is located.⁷ Imaging serves a critical function in the identification of FBs, encompassing their type, number, and location, while also excluding potential complications.⁶

¹Department of Radiology, Bandırma Onyedi Eylül University School of Medicine, Bandırma Research and Training Hospital Balıkesir, Turkey

²Department of General Surgery, Bandırma Research and Training Hospital Balıkesir, Turkey

³Department of Radiology, Bandırma Research and Training Hospital Balıkesir, Turkey

Corresponding author:

Eren Tobcu, Department of Radiology, Bandırma Onyedi Eylül University School of Medicine, Bandırma Research and Training Hospital Balıkesir, Mustafa Soner Varlık Cad., Balıkesir 10000, Turkey.

Email: drerentobcu@gmail.com



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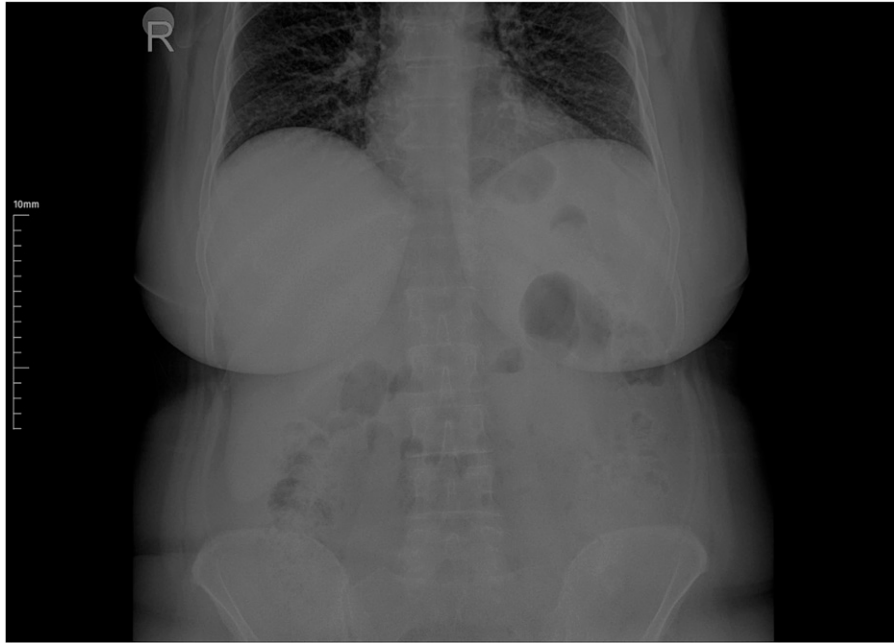


Figure 1. The initial plain P-A abdominal radiograph was unremarkable. P-A: Postero-anterior.

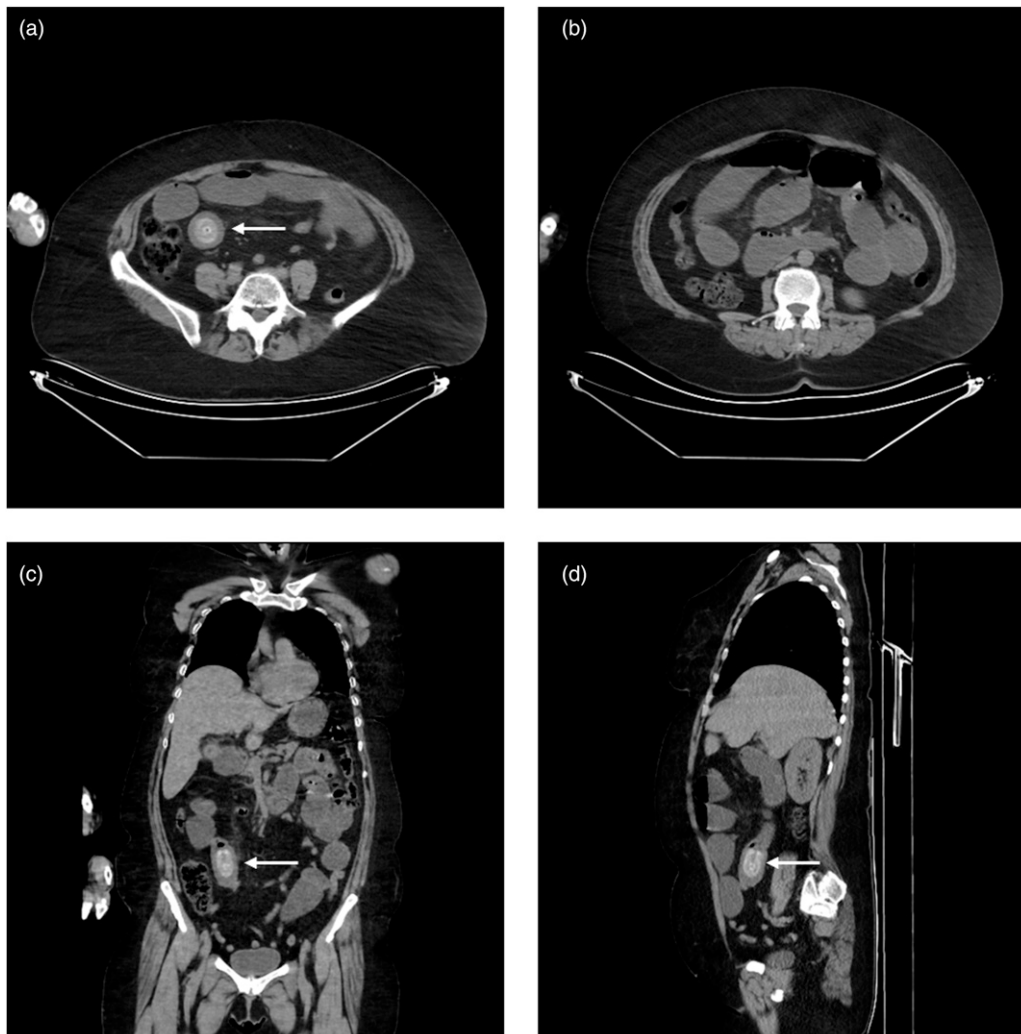


Figure 2. Abdomen CT reveals a 3 × 2 cm structure with a hyperdense contour within the terminal ileum (a, c, d, arrows). The proximal part of ileum was dilated due to obstruction (b). CT: Computed tomography.

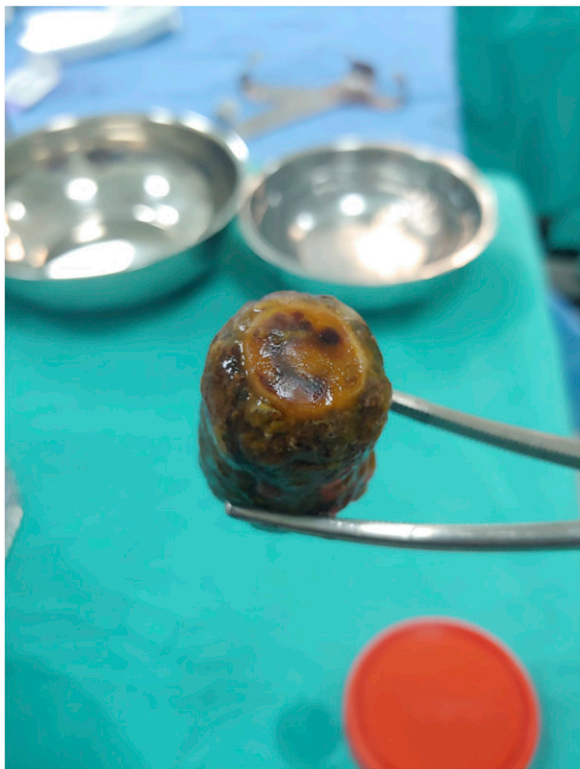


Figure 3. Wine cork that was extracted from terminal ileum.

Presentation of case

A 54-year-old female patient presented to our emergency department with 5-day history of right lower quadrant abdominal pain associated with five episodes of vomiting. She endorsed dysuria, nausea, and constipation but denied fever, rash, bloody stools, and diarrhea. Her vital signs were stable. Anamnestic data revealed chronic alcohol consumption, while the past medical and surgical history was nonspecific. On examination, the patient had minimal tenderness over the suprapubic region without rebound. The initial laboratory workup and initial plain PA abdominal radiograph was unremarkable (Figure 1). I.V. contrast enhanced computed tomography (CT) of the abdomen and pelvis that was performed in the portal venous phase clearly demonstrated a 3×2 cm structure with a hyperdense contour within the terminal ileum. The proximal part of ileum was dilated due to obstruction (Figure 2).

The decision to operate was taken due to ileus caused by obstruction induced by FB in the terminal ileum. The laparotomy was performed with a midline incision. It was observed that the ileum, 50 cm proximal to the ileocecal region, was edematous and adherent to the surrounding tissues. The surgical procedure involved the removal of adhesions, followed by the identification of a foreign body measuring 3.5×2.5 cm within the ileum. A wine cork was

extracted by a 3 cm surgical cut performed in the terminal ileal segment (Figure 3). Postoperatively, the patient had an uneventful recovery and was discharged on day 3 without any complication.

Discussion

FB ingestion is a widespread problem, that can manifest in patients as asymptomatic or show mild to severe symptoms.⁸ If gastrointestinal FBs cannot be safely passed or removed through the GI tract, certain symptoms may arise as a result of trauma, perforation, and obstruction.^{9,10} The majority of ingested FBs, exceeding 80%, are able to pass through the gastrointestinal tract without requiring intervention.² Surgical procedures are necessary for the management of complications such as perforation, obstruction, and gastrointestinal bleeding.⁸ Spontaneous passage probability depends on several factors including the shape, composition, and size of the foreign body. Duration of ingestion and patient's age also play a critical role in the decision of management.¹¹

Plain radiography is a commonly utilized method for detecting the majority of FBs present in the gastrointestinal tract. AP and lateral radiographs of the neck, chest, and abdomen should be taken to ensure adequate coverage of the entire gastrointestinal tract.¹² Radiography can give crucial details including size, location, numbers, and the existence of sharp edges. Abdominal CT should be used in case of suspicion of serious complications such as obstruction and perforation. It is also possible to determine the passage of FBs treated non-operatively using serial radiographic scans.^{13,14}

In this article, we reported a case of a 54-year-old patient with an accidental ingestion of a wine cork, who presented to our emergency department with 5-day history of right lower quadrant abdominal pain. In our case, the patient had undergone surgery because of the ileus symptoms.

In conclusion, the utilization of radiographic methods for the detection of FB and identification of potential complications like obstruction-related ileus and perforation is significant in expediting appropriate medical interventions for patients.

Declaration of conflicting interests

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ORCID iD

Eren Tobcu  <https://orcid.org/0000-0002-0144-0142>

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