Friend or foe: an unusual case of small intestinal mass

A previously healthy 72-year-old woman presented with a 2-year history of recurrent abdominal pain and bloating. The abdominal symptoms were often associated with food ingestion. No changes in defecation habits were noted. A local hospital diagnosed the patient with a mass in the small intestine and instructed regular follow-ups. The patient decided to seek further treatment at our facility and was scheduled for a small-intestine computed tomography (CT) scan with contrast.

The CT scan showed a hyperdense mass in the proximal jejunum (▶ **Fig. 1 a**), measuring 43×35 mm, with neighboring intestinal dilation (▶ **Fig. 1 b**). No thickening or enhancement of the small-intestine wall was observed.

Owing to the location of the mass, an antegrade double-balloon endoscopy (DBE) was performed for diagnosis. The scope was advanced to the horizontal part of the duodenum, near the ligament of Treitz, where a large duodenal diverticulum was noted (▶ **Fig. 2 a**). The cavity was obstructed by a disk-shaped, yellow bezoar, with a size of approximately 30×40 mm (▶ **Fig. 2 b**). A combination of endoscopic lithotripsy and lithotomy procedures were performed, and the bezoar was successfully removed (▶ **Fig. 3**, ▶ **Video 1**).

Bezoar is a foreign body that can be found anywhere in the gastrointestinal tract and is usually composed of animal or vegetable material [1]. The condition is more common in patients with predisposed conditions, such as poor gastric motility or previous gastric surgery. The most commonly used treatment for bezoar includes a combination of endoscopic lithotripsy with basket or fragmentation with polypectomy snares. Coca-Cola administration to dissolve the bezoar has also been proven to be a cheap and safe alternative [2]. However, due to the predisposed anatomical abnormality in this specific case, combined diverticulectomy may be necessary in the future.

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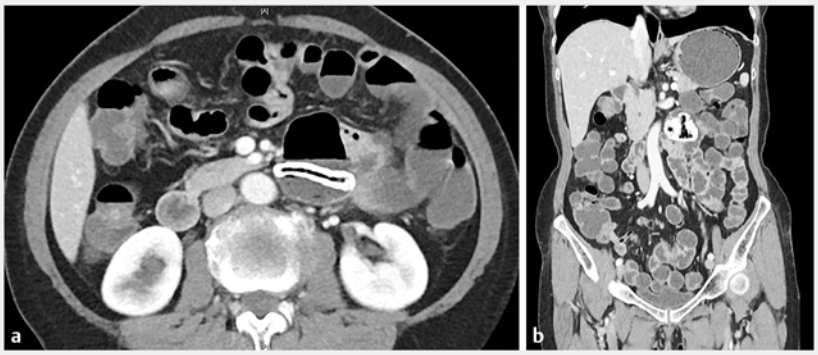
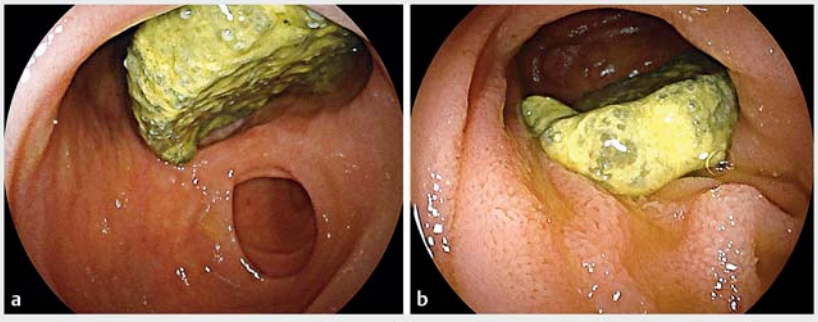


▶ **Fig. 1** Computed tomography scan of the small intestine. **a** Transverse view. **b** Coronal view.



▶ **Fig. 2** Double-balloon endoscopy of the small intestine. **a** A diverticulum was identified in the distal duodenum. **b** A large, disk-shaped bezoar was embedded in the duodenal diverticulum.

▶ **Fig. 3** Removal of the bezoar after intraluminal fragmentation.

Video 1 A double-balloon endoscopy was used for diagnosis of the unidentifiable mass in the small intestine. A large bezoar was located in a duodenal diverticulum. We attempted to remove the bezoar with a combination of lithotripsy and fragmentation.

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Competing interests

None

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References

[1] Byrne WJ. Foreign bodies, bezoars, and caustic ingestion. Gastrointest Endosc Clin N Am 1994; 4: 99 – 119
[2] Ladas SD, Kamberoglou D, Karamanolis G et al. Systematic review: Coca-Cola can effectively dissolve gastric phytobezoars as a first-line treatment. Aliment Pharm Ther 2013; 37: 169 – 173

Bibliography
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