

Subacutely Formed Bezoar Resulting from Accidentally Ingested Industrial Material

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Bezoars are the most common foreign bodies of the gastrointestinal tract. Clinical manifestations vary depending on the location of the bezoar, from no symptoms to acute abdominal syndrome. The ingestion of cling film, which is used for preserving food, may lead to a mechanical obstruction of the gut, especially at the second portion of the duodenal segment, and could manifest with abdominal pain, epigastric distress, nausea, vomiting, and fullness. We report the case of a 72-year-old man who presented with gastric outlet obstruction after accidentally ingesting cling film. He completely recovered after it was endoscopically removed. Cling film is not toxic but has erosive effects. Endoscopic removal of such material is recommended. Moreover, psychiatric intervention and management is imperative to prevent recurrence in such cases. [*J Chin Med Assoc* 2009;72(4):202–203]

Key Words: bezoar, bezoar formed industrial material, bezoar in elderly, endoscopic removal of bezoar, gastric outlet obstruction

Introduction

Bezoars are rare causes of gastrointestinal obstruction. They mostly originate in the stomach, and occur mainly in patients with psychiatric ailments who chew and swallow their hair (trichobezoar), vegetable fibers (phytobezoar), persimmon fibers (diospyrobezoar), or tablets/semi-liquid masses of drugs (pharmacobezoar).^{1,2} Industrial materials including wood trash and polystyrene have also been reported as rare causes of bezoar formation.^{3,4} Herein, we describe a case of subacutely formed gastric bezoar due to ingestion of cling film.

Case Report

A 72-year-old patient presented with lack of appetite, vague epigastric pain, and nausea and vomiting. He complained of abdominal pain and distension for 15 days, which eventually increased after meals and had been worsening for the last 7 days. Upper abdominal ultrasonography performed in the emergency department revealed significant abdominal distension, so the patient was hospitalized for further investigation.

He was hemodynamically stable and cooperative. He was conscious, and his cognitive functions and memory were normal. Findings during chest and abdominal physical examination were normal except for tenderness in the upper abdomen and gastric clapotage. Laboratory tests including total blood count, fasting blood glucose, renal and liver function tests, serum electrolytes, C-reactive protein and lipase levels were all within normal ranges.

Plain abdominal radiography did not show any radio-opaque bezoar in the gastric region. After appropriate local anesthesia by lidocaine spray, upper gastrointestinal endoscopy was performed using an Olympus GIF-Q240 video endoscope (Olympus, Tokyo, Japan). The stomach was full of a dark brownish colored fluid. After aspirating approximately 500 mL of this fluid, scattered gastric erosions were noted. A bright yellow-colored string-like material was seen at the pylori and laid along the 1st and 2nd portions of the duodenum. The foreign material was endoscopically removed with the aid of a forceps. The procedure was successful and well tolerated. We found that the foreign material comprised 2 pieces of curled up films and had the shape of a thick string; they were 20 × 14 cm and 20 × 10 cm pieces of cling films. The complaints of



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the patient were resolved immediately after removal of the bezoars.

Discussion

Most reported bezoars are concretions of poorly digested materials. They are usually initiated in the stomach, although some may migrate into the bowel or backward into the esophagus.^{1,2}

Bezoars usually form after a chronic ingestion or consumption of indigestible materials/foods.¹⁻⁴ The condition reported here can be named as subacutely formed bezoar because the cling film had been ingested in the previous 15 days.

Bezoars may present with abdominal pain, epigastric distress, nausea, vomiting, fullness or bloating.³ When complicated, diminished peristaltic sounds, rebound tenderness, distension, diarrhea, constipation, vomiting, and abdominal pain may be found clinically.² The main manifestations of our patient were abdominal pain, nausea and vomiting, and partial gastric outlet obstruction.

The diagnosis of bezoar can often be made on the basis of conventional radiographic and barium study findings.⁵ On plain abdominal radiography, we did not find a radio-opaque bezoar.

Endoscopic investigations can show all gastric bezoars.⁶ Bezoars located in the esophagus or stomach should be treated conservatively in the first instance. Surgery is recommended in cases with massive and non-progressive foreign bodies, or complicated cases presenting with perforation, penetration, hemorrhage, or obstruction. Moreover, those causing acute intestinal obstruction require surgical intervention.² In our patient, we removed the bezoar endoscopically, and the procedure was successful and safe.

The other part of management of such a bizarre bezoar is considering whether the ingested material is additive, toxic or corrosive. Although we considered that he could be a narcotics porter because he had swallowed the cling film without chewing it, we did not detect any systemic and localized toxicity in our patient.

As most patients with bizarre bezoar are suffering from psychiatric disorders, psychiatric intervention and management can help to prevent recurrence in such cases. Elderly people could have cognitive function disorders such as dementia without having any psychiatric problem, and they could ingest foreign bodies accidentally. This may cause an acute abdominal syndrome that appears in a couple of days or that leads to a chronic, asymptomatic situation for months. However, this case was classified as subacute because the obstruction was revealed after 15 days.

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