

Benign gastric outlet obstruction by a large phytobezoar

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We read with interest the article of Shetty *et al* [1] on trichotillomania with gastric trichobezoar obstruction. Similarly, Zin *et al* [2] reported on okra phytobezoar-related gastrojejunostomy efferent limb obstruction.

We report a case of a 76-year-old man with a medical history of ulcer disease referred to our hospital due to recurrent vomiting, nausea and inability of food intake for the previous 48 h. On admission, his vital signs were normal (temperature: 36.5°C, blood pressure: 125/80 mmHg, heart rate: 93 bpm). Physical examination revealed mild sensitivity, distension of abdomen with splashing and presence of normal bowel movements. Laboratory tests, compared to previous ones, showed a significant increase in the hematocrit (51.8% from 46.1%) and serum urea (71 mg/dL from 47 mg/dL) implying moderate dehydration. Chest and abdominal X-ray showed a marked gastric air bubble, air-fluid levels located on small intestine and a downward shift of transverse colon (Fig. 1). Abdominal ultrasound demonstrated a stomach full of liquid content. The patient received parenteral hydration and a nasogastric tube was placed. Twelve hours later, approximately 2,500 mL had been drained. Upper gastrointestinal endoscopy revealed a phytobezoar with a diameter of 4 cm, impacted in the pyloric canal. The phytobezoar was captured with a Dormia basket and was extracted (Fig. 2). After the extraction, the antrum was inspected revealing erythema and nodular appearance of the propyloric area. Biopsies were taken to exclude malignancy. Insertion of the endoscope through the pylorus was successful, without any further findings in the duodenum. After the procedure, the patient mentioned that a few days before admission he ate an orange without proper mastication (he did not have his dentures on). The patient started oral feeding with instructions of mindful chewing. Treatment with proton pump inhibitors q.d. for one month was given. To our knowledge, he remains asymptomatic. Histology was negative.

Gastric outlet obstruction (GOO) is the clinical and pathophysiological consequence of any disease process that produces a mechanical impediment to gastric emptying. In the past, when peptic ulcer disease (PUD) was more prevalent, benign causes were the most common, however, one review shows that only 37% of patients with GOO have benign disease and the remaining patients have obstruction secondary to malignancy [3]. The leading causes of benign GOO are PUD and ingestion of corrosives [4]. Non-steroidal anti-inflammatory drugs and opium addiction are rare causes of GOO [5]. Other benign causes are gastric polyps, pyloric stenosis, congenital duodenal webs, gallstone obstruction (Bouveret syndrome), pancreatic pseudocysts and bezoars [4]. Among the various types of bezoars, the most common

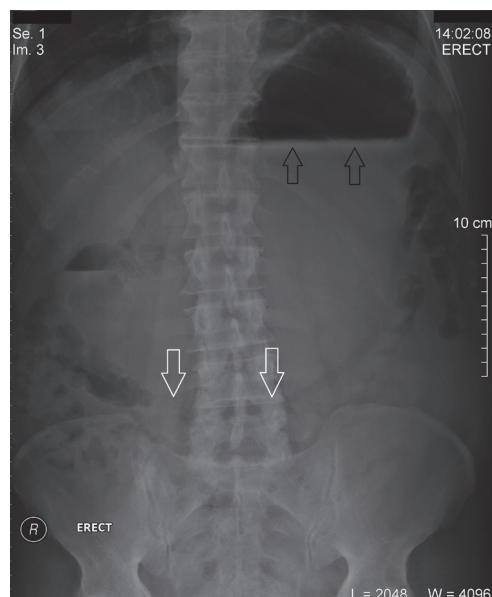


Figure 1 Abdominal X-ray of the patient which showed a marked gastric air bubble (black arrows) and a downward shift of transverse colon (white arrows)

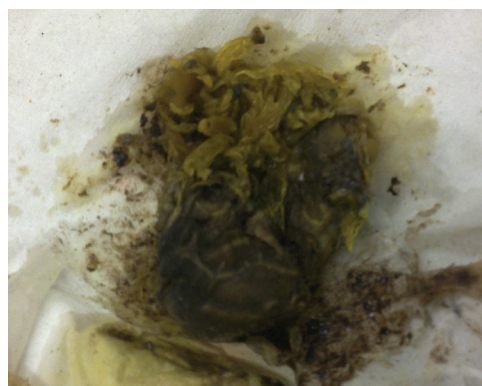


Figure 2 The orange-phytobezoar after it was extracted

type is the phytobezoars, composed mainly of undigested vegetable materials [2].

In conclusion, proper mastication should always be recommended to people with dentition problems. Treatment of any underlying cause with adequate fluid intake and avoidance of a strictly fibrous diet could prevent recurrence.

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Conflicts of Interest: None

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