

## Letter to the Editor

## Gastric outlet and ileal obstruction due to recurrent persimmon phytobezoar: clinical image

Ebubekir Gündeş, Hüseyin Çiyiltepe, Durmuş Ali Çetin, Ulaş Aday, Emre Bozdağ,  
Selçuk Gülmez, Aziz Serkan Senger

Gastroenterological Surgery Department, Kartal Koşuyolu High Speciality and Training Hospital, Istanbul, Turkey

**Submitted:** 11 January 2017

**Accepted:** 7 February 2017

Arch Med Sci Civil Dis 2017; 2: e11–e12

DOI: <https://doi.org/10.5114/amsd.2017.66355>

Copyright © 2017 Termedia & Banach

**Corresponding author:**

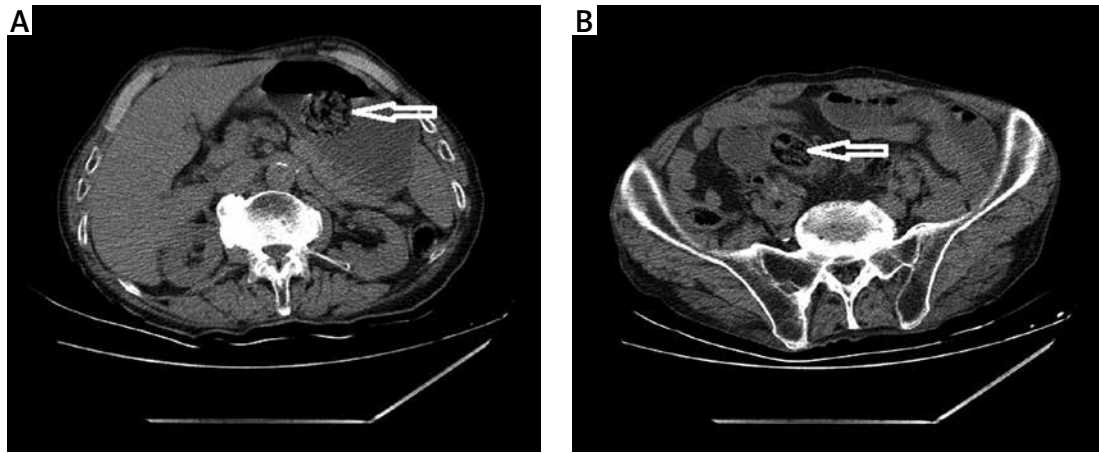
Ebubekir Gündeş  
Gastroenterological Surgery  
Department  
Kartal Koşuyolu High  
Speciality and Training  
Hospital  
Denizer cad. No: 22  
34000 Istanbul, Turkey  
Phone: +90 5058606740  
E-mail: ebubekir82@hotmail.  
com

Bezoars can be described as a concretion of accumulated indigestible materials in the gastrointestinal tract. They are often seen in the stomach as well as in the mesentery and may cause mechanical obstruction [1]. Bezoars are usually divided into 4 groups. They can be classified as intensive plant fibers (phytobezoar), swallowed hair (trichobezoar), milk curds (lactobezoars) and medications (pharmacobezoar) [2]. The main predisposing factors in phytobezoar formation are excessive intake of fibrous nutrients and drainage or gastric resection operations with truncal vagotomy performed in gastroduodenal ulcer surgery [1, 2].

A 78-year-old male patient presented to our clinic with complaints of abdominal pain, inability to pass gas or stool, vomiting and bloating that started 5 days ago. He had a history of surgery due to a bezoar 5 years ago. However, the patients' relatives reported that he had eaten persimmon before and after this operation despite all warnings. Physical examination of the patient revealed widespread tenderness and guarding in the abdomen. There were hyperdynamic bowel sounds. Laboratory tests showed leukocytes 12 800  $\mu$ l and C-reactive protein 14 mg/dl. The direct abdominal graph in the standing position showed the air-fluid level. In abdominopelvic computed tomography, dilatation in the stomach, a mass in the stomach lumen compatible with bezoar (Figure 1 A), dilatation of the intestinal segments evident in the ileal segments, and a filling defect in the ileum were observed (Figure 1 B).

The patient underwent laparotomy due to acute abdomen. The intestines were severely hyperemic and edematous. Phytobezoars were detected in the stomach and ileum. The phytobezoar in the ileum was mechanically disintegrated to the cecum and thereby the ileum was decompressed (Figure 2). Then, gastrotomy was performed and the phytobezoar in the stomach was removed (Figure 3), and the stomach wall was sutured. The patient was discharged without any problems on the 6<sup>th</sup> postoperative day.

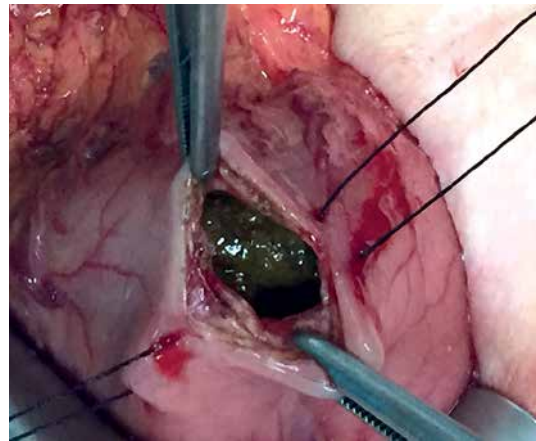
Conservative treatment can be tried initially in cases of bezoar-induced ileus without acute abdomen findings. Among these treatments, there are disintegrating agents such as nasogastric decompression, prokinetic agents, *i.v.* hydration and cellulose. If these treatments fail the patient should undergo surgery [1]. The entire gastrointestinal tract should be reviewed as the bezoars can be seen anywhere in the gastrointestinal tract [3]. For gastric bezoars, gastrotomy can be performed, and for small-bowel bezoars they can be broken up and milked into the



**Figure 1 A, B.** In abdominal computed tomography appearance of simultaneous phytobezoar in stomach and in ileum



**Figure 2.** Image of the phytobezoar in the ileum



**Figure 3.** Removal of bezoar through gastrotomy

cecum. If this is not possible and in cases of circulatory disorder in the small intestine, enterotomy and resection of the affected intestinal segment are performed [1–3].

As a result, the diagnosis of bezoars is difficult due to their rare occurrence. In cases with acute abdomen, treatment is surgical and the second focus should be investigated in all cases in which a phytobezoar is detected.

#### Conflict of interest

The authors declare no conflict of interest.

#### References

1. Iwamuro M, Urata H, Furutani M, et al. Ultrastructural analysis of a gastric persimmon phytobezoar. *Clin Res Hepatol Gastroenterol* 2014; 38: 85-7.
2. Tan F, Mo H, He X, Pei H. An unusual case of gastric outlet obstruction caused by multiple giant persimmon phytobezoars. *Gastroenterol Rep (Oxf)* 2016; 23: pii: gow042.
3. Funamizu N, Kumamoto T, Watanabe A, et al. Intestinal obstruction caused by persimmon bezoar: a case report. *Int Surg* 2015; 100: 1194-8.