Intermittent small-bowel obstruction due to a mobile bezoar diagnosed with single-balloon enteroscopy

Fig. 1 Abdominal computed tomography (CT) showed fecal material in the ileum (arrow) with dilatation of the small intestine.

Fig. 2 Retrograde single-balloon enteroscopy showed a 4–5 cm, mobile bezoar accompanied by ulcers in the ileum.

Fig. 3 The bezoar was fragmented with forceps and snare; the lumen was not obstructed.

A 62-year-old man with a history of diabetes mellitus had been having intermittent, cramping abdominal pain for 2 months. He also had abdominal distension, which tended to improve spontaneously. Physical examination of the abdomen showed mild distension with decreasing bowel sounds. A small-bowel barium study showed delayed passage of the contrast medium and a dilated small bowel but no mechanical obstruction. Abdominal computed tomography (CT) also showed dilatation of the small intestine with fecal material in the ileum (● Fig. 1). Retrograde single-balloon enteroscopy revealed a mobile bezoar, about 4–5 cm in size, along with several ulcers in the ileum (100 cm proximal to the ileocecal valve) (● Fig. 2). The bezoar was fragmented with forceps and snare (● Fig. 3). The abdominal pain reduced and the patient started to feed well. Unfortunately, after 1 week he had abdom-

inal pain again, and surgery was carried out to remove the bezoar from the ileum. Gastrointestinal bezoars are rare, causing 4% of all small-bowel obstruction (SBO). The time period between development of symptoms to admission has been usually reported to be 2 days and the interval between admission to operation is also usually 2 days [1]. It is interesting that in our patient the bezoar presented with intermittent abdominal pain only, that is, without obstruction. This may be because the bezoar was not large enough to obstruct the lumen, but as it was mobile, it rolled around in the lumen. Preoperative diagnosis of bezoars by CT is difficult; the findings have included a well-defined, ovoid-shaped, intraluminal mass containing mottled gas, and they have also been referred to as small-bowel fecoliths [2,3]. Nevertheless, not all small-bowel fecoliths are bezoars. In SBO, in 55.9% patients re-

ported as having small-bowel fecoliths none had an impacted bezoar [2,4]. Balloon-assisted enteroscopy, including single- and double-balloon enteroscopy, is an excellent tool for evaluation of the small intestine. It can be used to fragment bezoars and resolve any obstruction [3]. In our case, although the bezoar was fragmented, it re-formed again 1 week later. Thus, management of a bezoar by fragmentation may not be enough, and it should be removed as soon as possible.

Endoscopy_UCTN_Code_CCL_1AC_2AH

Competing interests: None

C. W. Chang^{1,2}, C. W. Chang¹,
H. Y. Wang^{1,2}, M. J. Chen^{1,2}, S. C. Lin^{1,2},
W. H. Chang^{1,2}, J. J. Lee³

¹ Division of Gastroenterology, Department of Internal Medicine, Mackay Memorial Hospital, Taipei, Taiwan

² Mackay Medicine, Nursing and Management College, Taipei, Taiwan

³ Department of General Surgery, Mackay Memorial Hospital, Taipei, Taiwan

References

- 1 Ho TW, Koh DC. Small-bowel obstruction secondary to bezoar impaction: a diagnostic dilemma. *World J Surg* 2007; 31: 1072–1078
- 2 Osada T, Shibuya T, Kodani T et al. Obstructing small bowel bezoars due to an agar diet: diagnosis using double balloon enteroscopy. *Intern Med* 2008; 47: 617–620
- 3 Chou JW, Lai HC. Obstructing small bowel phytobezoar successfully treated with an endoscopic fragmentation using double-balloon enteroscopy. *Clin Gastroenterol Hepatol* 2009; 7: e51–52
- 4 Lazarus DE, Slywotsky C, Bennett GL et al. Frequency and relevance of the “small-bowel feces” sign on CT in patients with small-bowel obstruction. *AJR Am J Roentgenol* 2004; 183: 1361–1366

Bibliography

DOI 10.1055/s-0030-1256450

Endoscopy 2011; 43: E297

© Georg Thieme Verlag KG Stuttgart · New York · ISSN 0013-726X

Corresponding author

H. Y. Wang

Division of Gastroenterology
Department of Internal Medicine
Mackay Memorial Hospital
No.92 Sec. 2 Chung-Shan North Road
Taipei
Taiwan
Fax: 886-2-25433642
hywang@ms2.mmh.org.tw