

A Huge Gastric Trichobezoar in a Teenage Girl

Seyed Mohammad Vahid Hosseini,
Hamid Reza Foroutan, Sirous Abbasi,
Seyed Abbas Banani

Abstract

A 13-year-old girl presented with a history of not being well during the past six months. The ultrasound examination showed an epigastric mass, which was diagnosed as a bezoar within the stomach in upper gastrointestinal endoscopy. The patient was managed by operative evacuation. It was interesting that such a large bezoar did not cause any significant obstruction for the patient.

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Keywords • Trichobezoar • syndrome • abdominal • mass • surgical treatment

Introduction

Bezoars are foreign bodies in the lumen of the digestive tract. Trichobezoar consists of hair, usually the patient's own, but it can also include other non-degradable fibers. Gastric trichobezoar extending distally into the duodenum has been described as Rapunzel syndrome. The lumen size increases in time by the accumulation of ingested non-absorbable food or fibers and causes many different symptoms.^{1,2}

We present a patient with a huge gastric trichobezoar (Rapunzel syndrome) without outlet obstruction who was managed successfully with surgical operation.

Case Report

A 13-year-old girl was admitted to our ward in November 2006, with the complaint of anorexia. Her mother said that she was not feeling well for the last 6 months; however, her weight loss was apparent. She also was aware of a lump in the epigastric region for 8 months (figure 1). Physical examination revealed a pale girl. There was a non-tender, firm, mobile lump palpable in the epigastrium. The clinical examination was otherwise normal except for some degrees of alopecia in the front part of the head. Her mother said that the girl had got the habit of eating her own hair.

The patient's hemoglobin was 9 gm/dl. Her urinalysis and serum electrolytes were normal. Chest radiography was reported to be normal. Ultrasonography of the abdomen revealed a heterogeneous mass in the epigastrium. Upper gastrointestinal (GI) endoscopy showed a huge intragastric mass with a hairy appearance. The patient was prepared for operation. Through an anterior gastrotomy incision, the bezoar weighing more than 1200 grams, was removed (figures 1, 2a and 2b). There was no adhesion between the gastric mucosa and the mass. The patient was subsequently referred for psychiatric evaluation. In the follow-up visit, she had gained weight and had an uneventful postoperative period.

Department of Surgery
Shiraz University of Medical Sciences,
Shiraz, Iran.

Correspondence:

Seyed Mohammad Vahid Hosseini MD,
Department of Surgery
Shiraz University of Medical Sciences,
Shiraz, Iran.

Tel: 98 711 6263041

Fax: 98 711 6239105

Email: psrg.sums@yahoo.com

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Figure 1: The abdominal mass in physical examination.

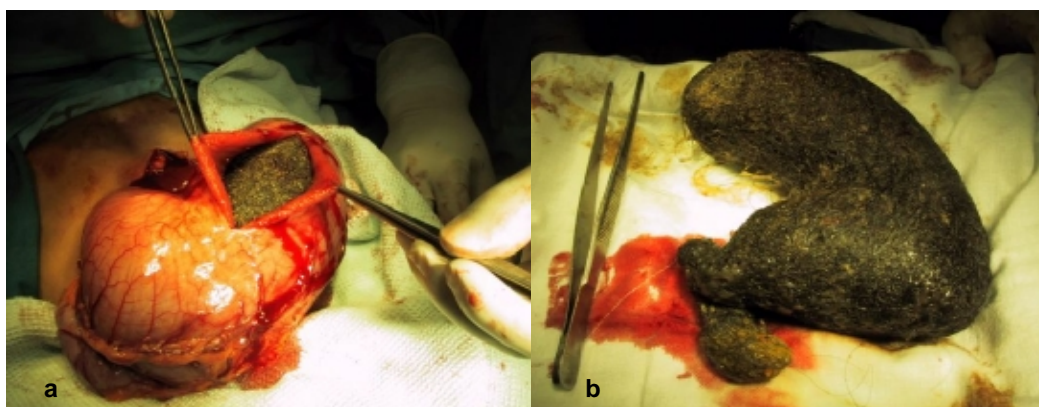


Figure 2a: Opened stomach with huge gastric trichobezoar. 2b: Cast of stomach and duodenum with mass of trichobezoar

Discussion

The most common clinical presentation of trichobezoar is a apathetic, anemic, anorexic, psychopathic child with an intra-abdominal mass; however, our presented patient, despite having a large visible intra-abdominal mass, which had formed a complete cast of stomach, had no prominent symptoms such as significant outlet obstruction and was free from abdominal discomfort, nausea, vomiting and hematemesis.¹⁻³

The first case of a human trichobezoar was reported in 1779 and the first surgical removal was performed in 1885.¹ Bezoar occurs mainly in young women who chew and swallow their hairs, vegetable fibers, persimmon fibers, or large quantities of semi-liquid drugs. Bezoars are mostly formed at the level of stomach because the stomach can not extrudes hair and other substances out of the lumen by peristalsis. Other complications of bezoars might include GI bleeding (6%) and intestinal obstruction, or perforation (10%).^{4,5}

Small bowel bezoars are usually associated with gastric bezoars. Bezoars that rise within

small bowel diverticula with obstruction have also been reported.⁵ The most common sites of obstruction are the gastric outlet and duodenum. Laboratory data may show anemia (mainly the iron deficiency type), which may be the result and not the cause of trichophagia.^{6,7}

In our patient, the bezoar extended to the duodenum (Rapunzel syndrome) without significant obstruction. We used abdominal sonography and upper GI endoscopy beside the history taking and clinical examination as the important measures to diagnosis. However, other modalities for detection of bezoars are available. Contrast radiography and upper GI endoscopy are the diagnostic procedures of choice for establishing the diagnosis of bezoars. Computed tomography can be used to localize the site of bowel obstruction.⁵⁻⁹ The treatment consists of removal of the mass by a single enterotomy or resection of the bowel if the first option is not feasible.^{8,9}

Conclusions

Trichobezoar is a rare clinical entity with many different presentations; however, it can be easily

treated by surgical operation.

Conflict of Interest: None declared

References

- 1 Wolfson PJ, Fabius RJ, Leibowitz AN. The Rapunzel syndrome: an unusual trichobezoar. *Am J Gastroenterol* 1987; 82: 365-7.
- 2 Lamerton AJ. Trichobezoars: two case reports -a new physical sign. *Am J Gastroenterol* 1984; 79: 354-6.
- 3 Shawis RN, Doig CM. Gastric trichobezoar associated with transient pancreatitis. *Arch Dis Child* 1984; 59: 994-5.
- 4 Chintamani, Durkhure R, Singh JP, Singhal V. Cotton Bezoar: A rare cause of intestinal obstruction: Case report. *BMC Surg* 2003; 3: 5.
- 5 Alsafwah S, Alzein M. Small bowel obstruction due to trichobezoar: Role of upper endoscopy in diagnosis. *Gastrointest Endosc* 2000; 52: 784-6.
- 6 Wang PY, Skarsgard ED, Baker RJ. Carpet bezoar obstruction of the small intestine. *J Pediatr Surg* 1996; 31: 1691-3.
- 7 Hoover K, Piotrowski J, St Pierre K, et al Simultaneous gastric and small intestinal trichobezoars: A hairy problem. *J Pediatr Surg* 2006; 41: 1495-7.
- 8 Billaud Y, Pilleul F, Valette PJ. Mechanical small bowel obstruction due to bezoars: Correlation between CT and surgical findings. *J Radiol* 2002; 83: 641-6.
- 9 Lee JM, Jung SE, Lee KY. Small-bowel obstruction caused by phytobezoar: MR imaging findings. *AJR Am J Roentgenol* 2002; 179: 538-9.