

PICTURES IN DIGESTIVE PATHOLOGY

Trichotillomania and trichophagia: The causes of Rapunzel syndrome

Nuno Veloso, João Dinis Silva, Lurdes Gonçalves, Isabel Medeiros, Rogério Godinho and Celeste Viveiros

Gastroenterology Department. Hospital Espírito Santo. Évora, Portugal

INTRODUCTION

Trichotillomania, the repeated action of pulling out one's own hair for pleasure or sensation of relaxation, and trichophagia, the result of hair eating, usually precede trichobezoar formation.

In most patients, the trichobezoar is located in the stomach; however, in a few number of patients, the gastric trichobezoar has a tail and extends through the pylorus into the small bowel and may even reach the colon, being titled as Rapunzel syndrome (1).

CASE REPORT

A 7-year-old girl presented to the emergency room with a history of epigastric pain and postprandial emesis over the preceding two days. Physical examination revealed a palpable bulky solid mass, in the epigastric region. Plain abdominal films revealed a mixed density image in the topography of the gastric cavity (Fig. 1). Abdominal ultrasound demonstrated an intragastric hyperechoic rounded solid image (Fig. 2). The final diagnosis was made by upper gastrointestinal endoscopy that showed a voluminous gastric trichobezoar with a tail that extended through the pylorus (blocking visualization) into the duodenal bulb (Fig. 3). An unsuccessful trial was made at endoscopic removal with mechanical and laser fragmentation techniques. Surgical gastrotomy was then performed and the trichobezoar (12.5 x 6 cm) was found with a short tail (1.5 cm) (Fig. 4).

DISCUSSION

Rapunzel syndrome is a rare form of trichobezoar. In the literature, various criteria have been used to classify Rapunzel syndrome, but there is no consensus on its definition. Some authors have defined it as a gastric trichobezoar with a tail that extends through the pylorus (2,3); others describe it as a tail that may extend up to the jejunum or beyond.

Patients may remain asymptomatic for many years and could be misdiagnosed by nonspecific symptoms. The gold standard in the diagnosis is upper gastrointestinal endoscopy.



Fig. 1. Mixed density image in the topography of the gastric cavity, with radiolucent areas suggesting the presence of intraluminal air.

Trichotillomania and trichophagia were only reported after the diagnosis in a focused interview with the parents.

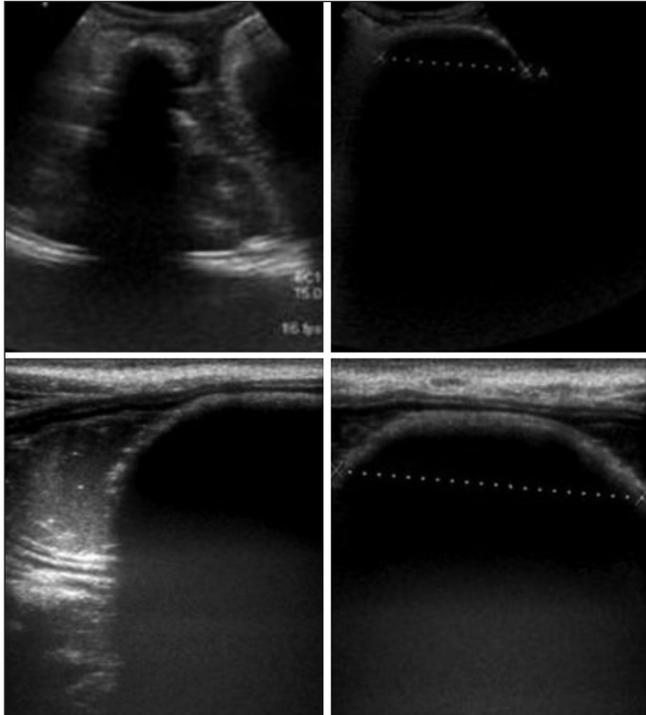


Fig. 2. Hyperechoic solid image (9 x 5 cm), in intragastric location with posterior sonic shadow and regular contours.

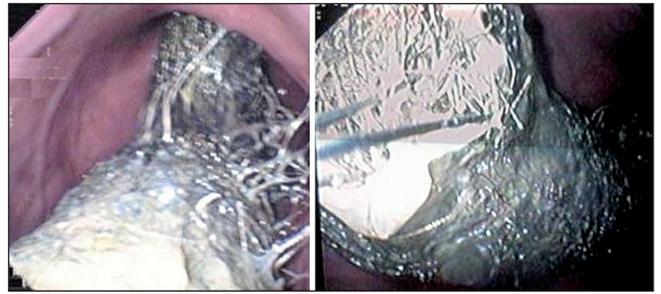


Fig. 3. Voluminous gastric trichobezoar with a tail which extends through the pylorus.



Fig. 4. Complete removal of bezoar.

REFERENCES

1. Vaughan ED, Sawyers J, Scott H. Rapunzel syndrome: An unusual complication of intestinal bezoar. *Surgery* 1968;63:339-43.
2. Mohanta P, Mukhopadhyay M, Maiti S, Mukhopadhyay B. Trichobezoar in children – an uncommon problem. *J Indian Assoc Pediatr Surg* 2004;9:30-2.
3. Singla SL, Rattan KN, Kaushik N, Pandit SK. Rapunzel syndrome – a case report. *Am J Gastroenterol* 1999;94:1970-1.