

## Trichobezoar and Rapunzel syndrome : an unusual cause of abdominal mass

L. O'Flynn<sup>1</sup>, B.R. Disney<sup>1</sup>, V. Menon<sup>2</sup>, J. Mannath<sup>1</sup>

(1) Department of Gastroenterology, University Hospital Coventry, Coventry, United Kingdom ; (2) Department of Upper Gastrointestinal Surgery, University Hospital Coventry, Coventry, United Kingdom.

### To the Editor,

A 36-year-old lady was referred by her GP to the Gastroenterology clinic with a history of recurrent vomiting, abdominal pain and excessive belching. She reported these symptoms had recently worsened resulting in a decreased appetite. She denied any blood in her vomit or stool and any weight loss over this period. On examination a firm irregular mass in the epigastrium region was noted. The remainder of her examination was unremarkable.

out her hair and swallowing it since childhood. The patient underwent an elective laparotomy at which time a trichobezoar 22x15x12cm was removed from the stomach without complications. The patient has remained well post-operatively.

Bezoars are a foreign body composed of ingested material that cannot be digested and are formed from a variety of substances; vegetable matter (phytobezoar), medication (pharmacobezoar), milk (lactobezoar) and hair (trichobezoar). As in this case, the trichobezoar is a result of the pulling out (trichotillomania) and ingestion

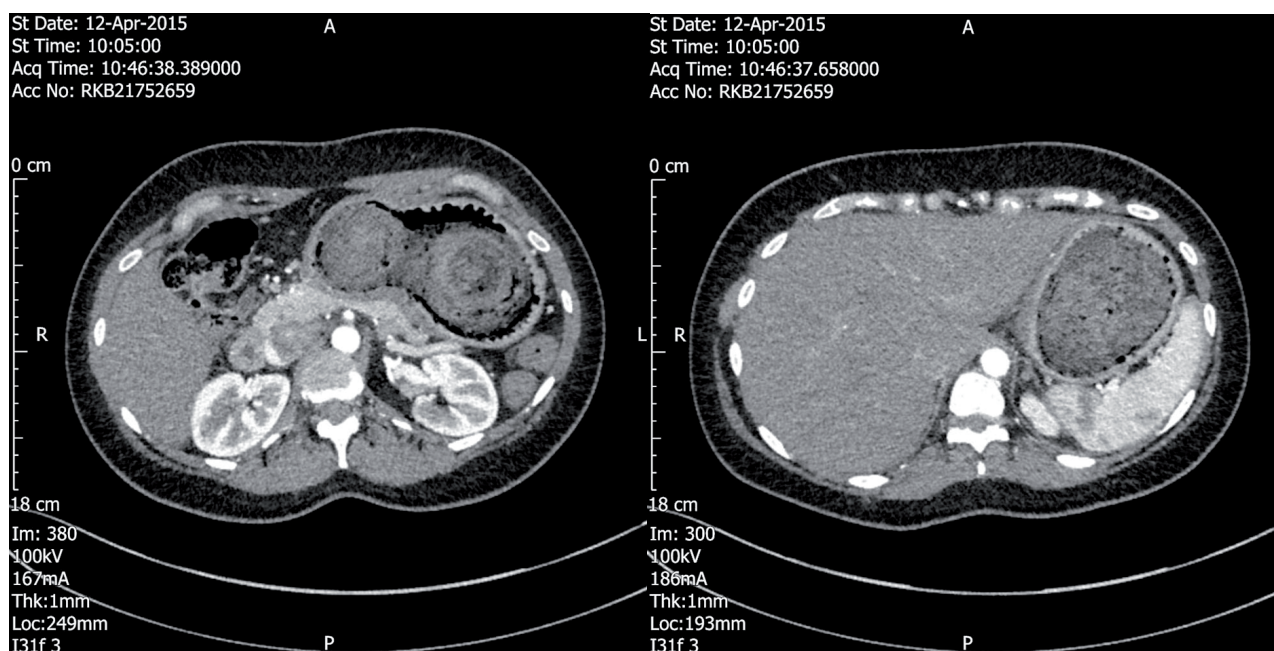


Fig. 1. — CT scan of the abdomen showing heterogeneously viscous non-enhancing gastric mass suggestive of trichobezoar

An urgent computed tomography (CT) scan showed thickening of the gastric wall with a heterogeneous viscous gastric mass suggestive of trichobezoar (Fig. 1). Subsequent esophagogastroduodenoscopy (EGD) revealed a trichobezoar in the gastric body extending to the pylorus which was 30 cm long (Figure 2). Attempts at endoscopic removal with a snare and basket were unsuccessful. The patient is currently awaiting surgical removal. Retrospectively, the patient admitted to pulling

of hair (trichophagia) and is often seen in young women. (1,2) Bezoars tend to develop over a prolonged period and are often asymptomatic. However, presenting

Correspondence to: Dr. Lauren O'Flynn, Department of Gastroenterology, University Hospitals Coventry, University Hospitals Coventry and Warwickshire NHS Trust, Coventry, United Kingdom.  
E-mail: l.oflynn@doctors.org.uk

Submission date : 09/06/2016  
Acceptance date : 08/07/2016

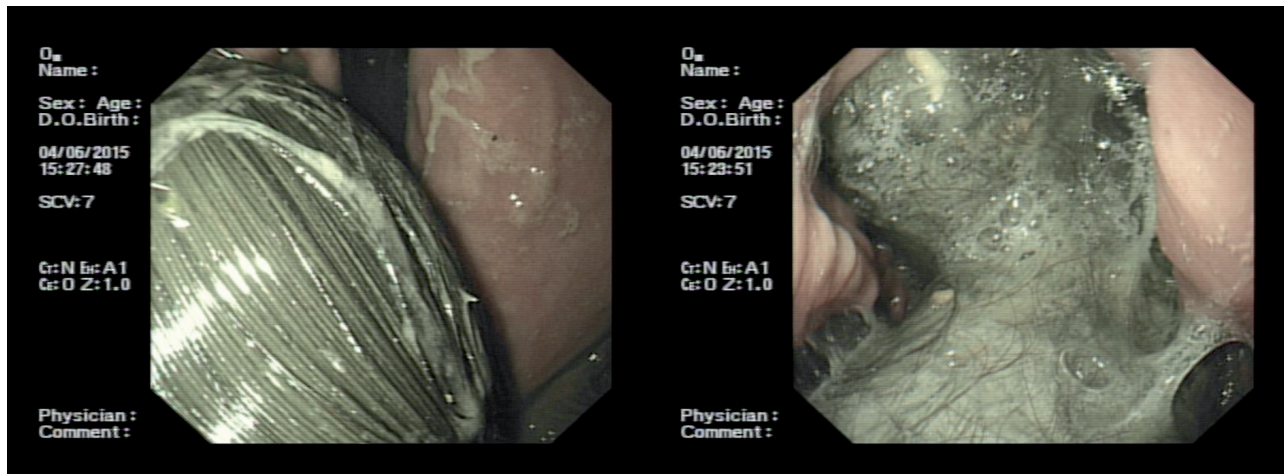


Fig. 2. — Endoscopic images showing trichobezoar

symptoms include abdominal pain or mass, nausea, early satiety and reduced appetite, weight loss and in some cases gastrointestinal bleeding. (1,2)

Bezoars are often diagnosed with a combination of CT and EGD. Rapunzel syndrome is when the bezoar extends into the small bowel; so named after the long-haired character of the Brothers Grimm fairy tale. Treatments include chemical dissolution (including the use of Coca-Cola and cellulase), endoscopic removal and surgery. (3-5) Patients with trichotillomania should undergo psychiatric assessment in an attempt to break the cycle. (5)

## References

1. IWAMURO M, OKADA H, MATSUEDA K, *et al.* Review of the diagnosis and management of gastrointestinal bezoars. *World J. Gastrointest. Endosc.*, 2015 Apr. 2016, **7**(4) : 336-345.
2. NAIK S., GUPTA V., NAIK S. *et al.* Rapunzel syndrome reviewed and redefined. *Dig. Surg.*, 2007, **24**(3) : 157-161.
3. LADAS S.D., KAMBEROGLU D., KARAMANOLIS G. *et al.* Systematic review : Coca-Cola can effectively dissolve gastric phytobezoars as a first-line treatment. *Aliment. Pharmacol. Ther.*, 2013 Jan, **37**(2) : 169-173.
4. FALLON S.C., SLATER B.J., LARIMER E.L. *et al.* The surgical management of Rapunzel syndrome : a case series and literature review. *J. Pediatr. Surg.*, 2013 Apr., **48**(4) : 830-834.
5. KIRPINAR I., KOCACENK T., KOÇER E. *et al.* Recurrent trichobezoar due to trichophagia : a case report. *Gen. Hosp. Psychiatry.*, 2013 Jul-Aug, **35**(4) : 439-441.