

**Case Report**

Gastroduodenal Trichobezoar: Case Report

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Background

Trichobezoar is a rare condition that usually occurs in adolescents with psychic disorders [1]. It refers to the unusual presence of hair, as a solid mass, in the gastrointestinal tract. It is suspected on radiology and confirmed by oesogastroduodenal fibroscopy. The treatment is essentially surgical associated with psychological care [2].

We report a case of gastroduodenal trichobezoar collected in the department of Gastroenterology of the CHU Ibn Rochd of Casablanca, Morocco.

Patient and observation

This was a 17-year-old girl, known to be depressed but not followed up, who had been presenting for six months with diffuse abdominal pain and early postprandial food vomiting with no weight loss. On examination, the patient reported the notion of trichophagia and onychophagia since the age of 12 years.

The general examination revealed a pale, malnourished patient with several patches of frontal and temporal alopecia, discolored conjunctivae and foul breath. Abdominal examination revealed abdominal tenderness with a 10 cm long epigastric mass, hard, mobile and painful, extending to the umbilicus. The rest of the somatic examination was unremarkable.

Abdominal CT scan showed gastric and duodenal distension with heterogeneous contents of fluid, fat and aeriform density with enhancement and regular thickening of the gastric wall (Figure 1).



Figure 1: Abdominal CT scan in axial section showing a gastric trichobezoar

The oesogastroduodenal fibroscopy confirmed the presence of a voluminous intraluminal formation made of intertwined hairs occupying the whole stomach in connection with the trichobezoar (Figures 2 and 3)

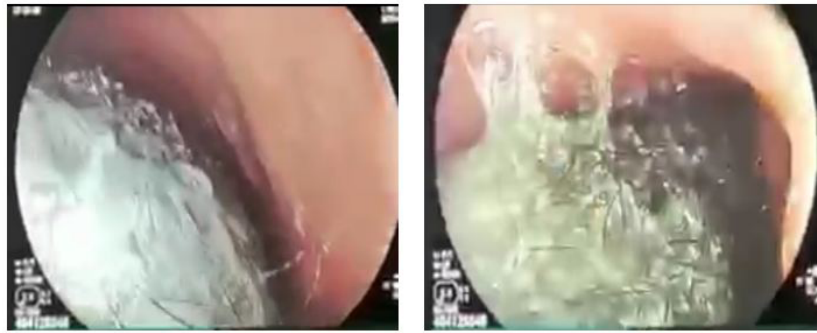


Figure 2,3: Gastric trichobezoar at oeso-gastro-duodenal fibroscopy

The biological workup revealed a microcytic hypochromic anemia at 9 g/dl with hypo albuminemia at 31 g/l. As endoscopic treatment was not feasible, surgical removal was performed through a longitudinal anterior gastrotomy allowing the extraction of a huge trichobezoar measuring 30 cm in long axis and following the whole shape of the stomach (Figures 4-6). The postoperative course was simple and a follow-up in a child psychiatry unit was instituted.

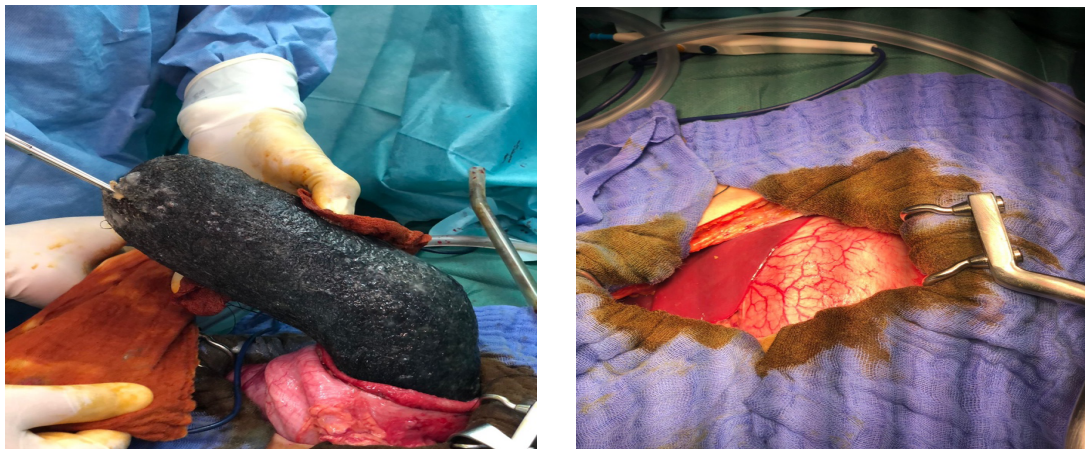


Figure 4,5: Extraction of the Trichobezoar by a longitudinal Gastrostomy

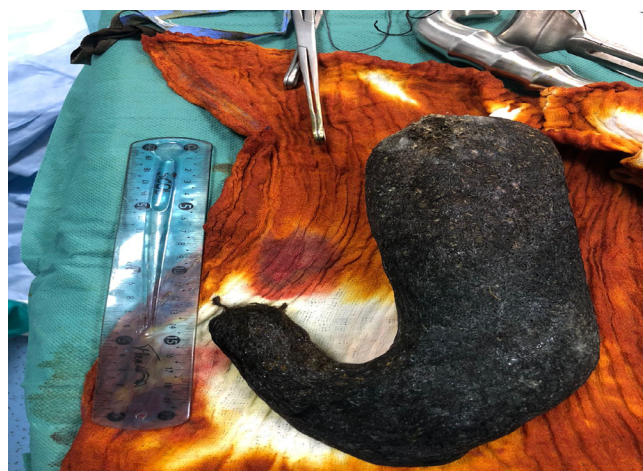


Figure 6: Voluminous gastric trichobezoars

Discussion

Trichobezoar is a rare condition secondary to the unusual accumulation of intertwined hairs, carpet fibers or hairs of varying size in the gastrointestinal tract. It is a predominantly female pathology in 90% of cases with a peak incidence between ten and 19 years of age [3], our patient was also included in this age group.

Trichobezoar is most often observed in patients with a predisposing terrain, notably psychiatric patients, mentally retarded people and prisoners [4,5].

The gastric localization of trichobezoar is by far the most frequent, but sometimes it can extend to the small intestine, or even to the transverse colon, thus realizing the Rapunzel syndrome [6,7]. In our patient, it was of gastric location.

The clinical symptomatology is non-specific. Trichobezoar can remain asymptomatic for a long time, thus causing a delay in diagnosis of several years, as in the case of our patient, or it can manifest itself by digestive disorders, in particular abdominal pain, a sensation of epigastric heaviness, nausea, vomiting, transit disorders and anorexia with weight loss. It can be revealed by a complication such as a mechanical gastric or intestinal occlusion, a digestive hemorrhage due to parietal ulcerations, a digestive perforation with peritonitis, or an acute pancreatitis attributed to an obstruction of the ampulla of Vater by an extension of the trichobezoar [1,2,6].

In 85% of cases, the clinical examination reveals a well-limited, smooth, firm, mobile abdominal mass located in the epigastric area [4,9]. The discovery of a localized patch of alopecia, of a mechanical nature, is a major sign of orientation and should lead to a search for trichophagia, as was the case in our patient.

The oesogastroduodenal fibroscopy is the examination of choice. It has a diagnostic interest by showing tangled hairs pathognomonic of trichobezoar and a therapeutic interest by allowing the endoscopic extraction of small trichobezoars [2]. However, because of the volume of the trichobezoar, this extraction is in most cases impossible, as in the case of our patient, and any attempt carries a risk of serious esophageal injury.

The trichobezoar appears on Computed Tomography (CT) as a mobile intraluminal mass of variable volume, heterogeneous and consisting of a multitude of concentric circles of different densities distributed like onion bulbs. Two pathognomonic and consistent signs in favor of trichobezoar are the presence of tiny air bubbles scattered within the mass and the absence of any attachment of the mass to the gastric wall [12,6].

Therapeutic management depends on the size of the trichobezoar and the presence or absence of complications. Thus, endoscopic extraction can be proposed for small gastric trichobezoars and surgery, through a gastrotomy completed with

a possible enterostomy, is reserved for voluminous trichobezoars, extended to the anses or at the stage of complications [2-13]. Recently, the laparoscopic approach has been proposed as an alternative to laparotomy [2].

Psychiatric management, based on behavioral therapy, parental education and medical treatment, should often be initiated in patients with trichophagia [2,4,14].

Conclusion

Trichobezoar is a rare pathology that usually occurs in adolescents with psychic disorders. The clinical symptomatology is very varied and its diagnosis is based on the data of the oesogastroduodenal fibroscopy and the imaging. The treatment is often surgical associated with psychiatric care of patients, which is an essential step in the prevention of recurrence

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