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Gastroduodenal trichobezoar: about a case

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ABSTRACT

Trichobezoar is a rare condition, but easy to diagnose in an evocative context. We report an observation of a young girl of 17 years old who reports the notion of onychophagia and trichophagia since the age of 12 years admitted for chronic abdominal pain, the abdominal scanner made it possible to suspect a bezoar by objectifying heterogeneous lesions occupying the entire stomach, not taking up the contrast and seeming independent of the gastric wall and confirmed by an esophago-gastroduodenal fibroscopy which showed the trichobezoar.

Surgical treatment was carried out with excision of the trichobezoar by gastrotomy without complications. Psychiatric treatment was provided.

Keywords: Gastric trichobezoar, esophagogastroduodenal fibroscopy, gastrotomy, psychiatry.

Introduction

The term bezoar refers to various foreign bodies found in the gastrointestinal tract.

Most are formed in the stomach by the accumulation of indigestible substances, such as certain plant fibers (phytobezoar), hair (trichobezoar), concentrated dairy products (lactobezoar), more rarely certain medications (pharmacobezoar). Trichobezoar (represents 55% of all bezoars) designating the unusual presence of hair, in the form of a solid mass, at the level of the stomach. Most often asymptomatic, its diagnosis is essentially based on fibroscopy. Treatment is often surgical [1|. The aim of this work is to discuss, through a case of gastric trichobezoar, the diagnostic difficulties and the different therapeutic methods.

Patient and observation

This is a 17-year-old girl with notion of onychophagia and trichophagia since the age of 12 who consulted for diffuse and chronic abdominal pain with-

out postprandial vomiting or transit disorders, in a context of anorexia and unquantified weight loss. The clinical examination found a patient in fairly good general condition, conscious, hemodynamically stable, we also noted frontal and temporal bald patches with discolored conjunctivas and fetid breath. Abdominal examination found abdominal tenderness and a hard, non-painful epigastric mass mobile in the superficial and deep plane, extending to the right hypochondrium. The remainder of the clinical examination was unremarkable. The biological assessment showed microcytic hypochromic anemia (hemoglobin: 5.4 g/DL). The patient was transfused with 3 units of blood cells with control CBC showing a hemoglobin of 11.4 d/dl. The rest of the assessment was normal. An abdominal CT (Figure 1) showed distension of the stomach and duodenum, the site of a heterogeneous lesion with fatty and airy fluid density, not enhanced by contrast and appearing completely independent of the gastric wall. The FOGD (Figure 2) revealed the presence of a bezoar made of hair occupying the entire antrofundic part with the presence of several sessile polyps. The patient was operated on (Figure 3, Figure 4), she benefited from surgical excision of the gastroduodenal trichobezoar measuring 20 cm through a longitudinal anterior gastrotomy and biopsy of a gastric polyp.

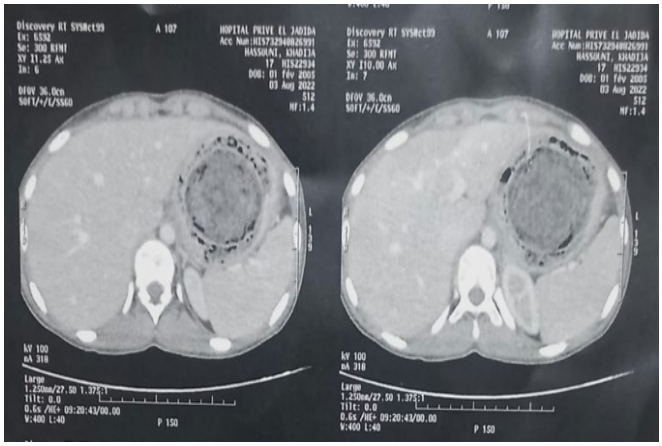

Figure 1 : Abdominal CT in axial section showing a gastric trichobezoar

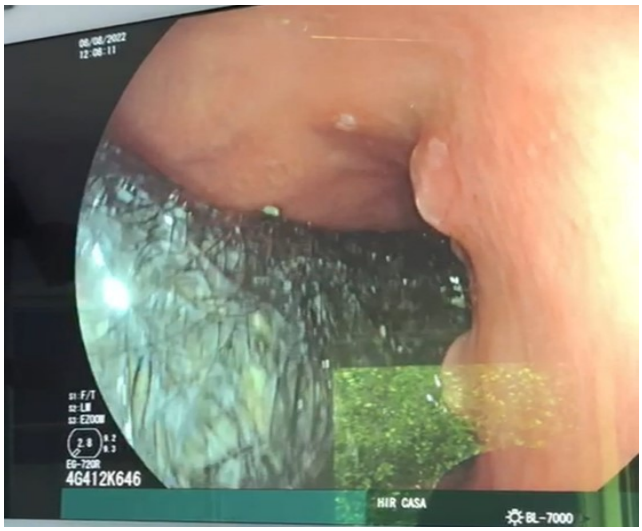

Figure 2 : FOGD confirming the trichobezoar

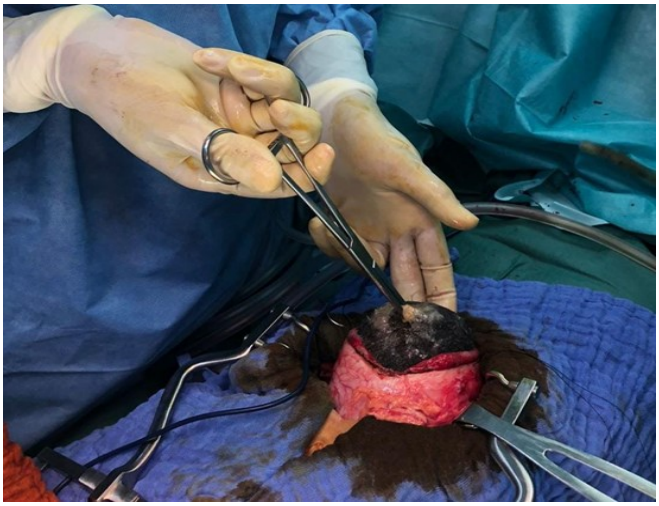

Figure 3 : Longitudinal gastrotomy to extract the trichobezoar

Figure 4 : Huge gastric trichobezoar

The postoperative course was simple. Psychiatric treatment was provided.

Discussion

Trichobezoar is a rare condition, the female sex is the most affected (90% of cases) and the age of onset is in 80% of cases less than 30 years, with a peak incidence between 10 years and 19 years. (1). Psychological pathologies are sometimes found such as psychomotor delay or isolation but only 9% of children with trichobezoar have real psychiatric problems [2, 3]. Trichobezoar most often occurs in the stomach but it can "extend to the small intestine, or even the transverse colon, thus producing Rapunzel syndrome [4]. In our patient, it is gastric and bulbar localized. The trichobezoar can remain asymptomatic for a long time or manifest as epigastric discomfort (80%), abdominal pain (70%), nausea or vomiting (65%), asthenia with weight loss (38%) or transit disorders (33%) such as diarrhea or constipation [5- 7] .

A complication may be the way this pathology is revealed [Z]. It may be an upper digestive hemorrhage due to parietal ulcerations, a mechanical gastric or small intestine obstruction [8, 9], a gastric or small intestine perforation with peritonitis or subphrenic abscess [9-11], a digestive fistula [11, 12], cholestasis or acute pancreatitis due to obstruction of the ampulla of Vater by extension of the trichobezoar (Rapunzel syndrome) [13, 14]. On clinical examination, in 85% of cases, there is a well-defined, smooth, firm, mobile abdominal mass with an epigastric location. Alopecia may also be noted (5, 7]. Our patient presented with an epigastric abdominal mass extending towards the right hypochondrium with epigastric tenderness and bald patches.

The diagnosis is based on FOGD which remains the examination of choice, allowing the visualization of tangled hair pathognomonic of trichobezoar. It can sometimes be of therapeutic interest by allowing the endoscopic extraction of small trichobezoars[Z]. However, because of the volume of the trichobezoar, this extraction is in the majority of cases impossible, like the case of our patient, and any attempt carries a risk of serious esophageal damage. The plain abdominal film may show a dense or heterogeneous rounded mass with or without calcification projecting onto the gastric area [15]. Abdominal ultrasound only makes it possible to make the diagnosis in 25% of cases, by visualizing a superficial, hyperechoic, curvilinear band with a clear posterior shadow cone [16, 17]. Esogastroduodenal transit reveals a mobile gastric intraluminal lacuna with convex edges, which may extend into the duodenum [6]. The transit of the small intestine completes the exploration of the intestine in search of a continuous distal extension or detached fragments [1]. Abdominal CT can show a mass of variable volume, heterogeneous, occupying almost the entire gastric lumen and made up of multiple concentric circles of different densities distributed like onion bulbs. Two constant pathognomonic signs are the presence of tiny air bubbles dispersed within the mass and the absence of any attachment of it to the gastric wall [15].

Several therapies have been reported in the literature. Thus, in the presence of small trichobezoars, some authors suggest the use of copious drinks associated with taking transit accelerators, and others suggest endoscopic extraction. Other authors propose fragmentation of the trichobezoar, either endoscopically by laser beam and mini-explosion [18], or by extracorporeal lithotripsy [19]. In addition to incomplete treatment, these methods expose a risk

of iatrogenic complications, particularly esophageal or intestinal obstruction due to trichobezoar fragment. Treatment is therefore often surgical. The surgery allows the exploration of the entire digestive tract, the extraction of the gastric trichobezoar through a gastrotomy, as well as the extraction of possible extensions (tail) or fragments blocked away from the stomach through one or more enterotomies [1, 20]. Recently, the laparoscopic approach has been proposed as an alternative to laparotomy [1]. Furthermore, psychiatric care must often be instituted for patients [1].

Author Contributions All authors have read and approved the References

Conclusion

Trichobezoad is a rare pathology, the diagnosis is confirmed by gesogastroduodenal fibroscopy, radiological exploration, particularly by CT, is essential, to highlight other locations. The treatment of choice is surgery; this should not overshadow the psychiatric care of patients.

Conflicts of interest

The authors declare no conflicts of interest.

Author contributions

All authors contributed to this work, read and approved the final version of the manuscript.

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