



Gastric Trichobezoar: A Case Report

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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Case Study

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ABSTRACT

Trichobezoar is a foreign body in the digestive tract, made up of hair and fibers. Rarely encountered, and usually occurring in adolescent girls with a proven psychiatric history, it is often strictly gastric in location. We report the case of a 21-year-old breast-feeding patient with a poorly elucidated psychiatric history, who unconsciously consumed her own hair for two years. Upper digestive endoscopy was sufficient to make a positive diagnosis. Treatment was surgical, and the post-operative course was straightforward. We therefore strongly recommend oesogastroduodenal fibroscopy in the management of identical forms. However, supportive psychotherapy after surgical treatment should be the rule.

Keywords: Trichobezoar; endoscopy; surgery; psychotherapy.

1. INTRODUCTION

The trichobezoar is a foreign body present in the digestive tract, composed of hair and fibers.

In the vast majority of cases, it develops in the stomach, but can progress into the intestinal lumen often causing an obstruction.

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Its diagnosis is mainly based on upper digestive endoscopy and its treatment is essentially surgical.

However, to clarify the extension, eliminate the existence of other synchronous localizations and look for complications, CT may be suggested.

2. CASE PRESENTATION

We report the case of a 21-year-old breastfeeding woman with a very poor psychiatric history who was admitted to the visceral surgery emergency department of the Ibn Sina hospital in Rabat because of epigastralgia, epigastric heaviness, early postprandial vomiting, deterioration of her general condition and plaques of alopecia.

Her history dates back two years when, after conceiving a pregnancy, the patient began to eat her own hair, unconsciously she said, and this up to two years after giving birth. Her husband said that he had noticed a progressive weight loss in

his wife, which he associated with pregnancy and breastfeeding, but had never known that his wife was eating her own hair. The husband decided to accompany his wife to the hospital because of these signs. An esophagogastroduodenal fibroscopy (FOGD) performed externally revealed a trichobezoar consisting of human hair, which occupied the entire gastric lumen up to two thirds of the pylorus, leaving a small passage to the duodenum. Given the impossibility of endoscopic extraction, the patient was referred to our department for better care. A preoperative assessment was performed and showed a haemoglobin level of 10.5g/dl, mild hyponatremia and hypokalemia, hypoalbuminemia at 2.5g/dl.

After conditioning and correction of the hydroelectrolyte disturbances, the patient was presented to the UCV staff where it was decided to perform a gastrotomy for bezoar extraction without further imaging.

The patient was scheduled and a gastrotomy with removal of the trichobezoar was performed.

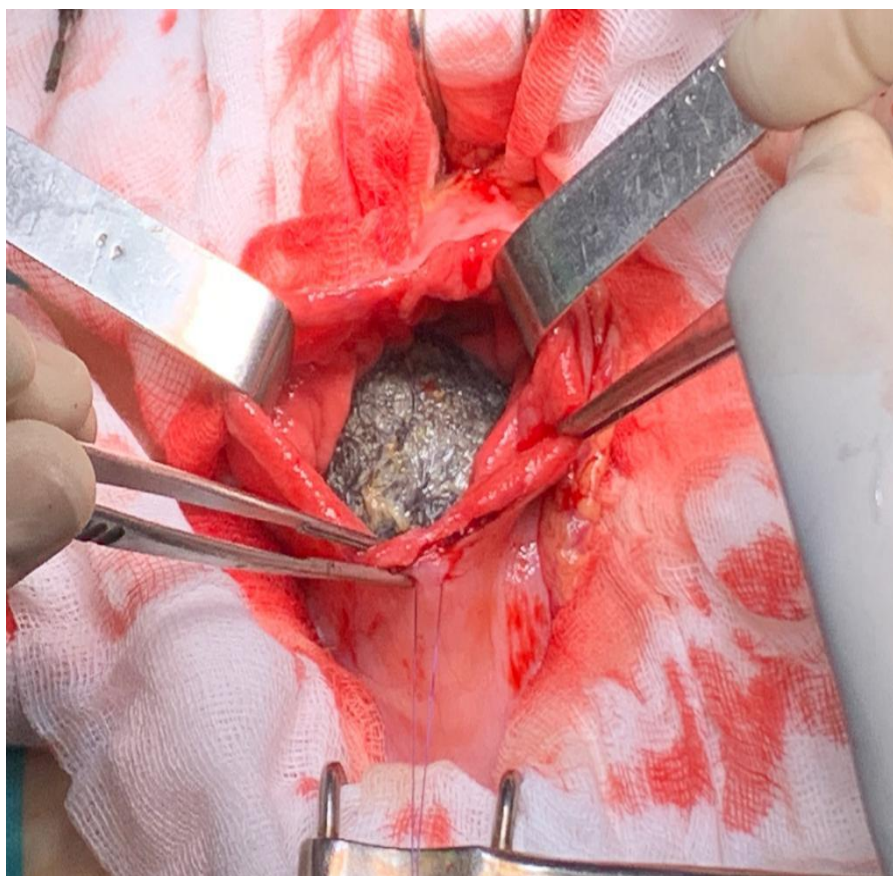


Fig. 1. Image of intraoperative gastrotomy



Fig. 2. Image of the surgical piece made of human hair (those of the patient)

The postoperative course was straightforward, with a gradual resumption of diet and the administration of a proton pump inhibitor, an antibiotic and an antispasmodic. Gradual weight gain was observed after three months.

A psychiatric consultation was scheduled after the wound had healed.

3. DISCUSSION

According to the data in the literature, the trichobezoar is often discovered in young children or even in adolescents and especially in young girls [1-7].

Trichophagia and trichotillomania since childhood are frequently mentioned [8-11]. The first case of trichobezoard was published in 1779 [12,13] and they represents 55% of all bezoars. It is made of hair, hair material or carpet fibers of variable size, most often intertwined in the gastric lumen. It can sometimes be prolonged in the duodenum, the jejunum and even beyond. It is known as "Rapunzel Syndrome" [14].

In our study, it is a 21-year-old nursing lady who presented with nutritional disorientation from the beginning of her pregnancy until one year after

childbirth, by sneakily and unconsciously consuming her own hair.

The factors favoring the appearance of other bezoars are diverse: gastric emptying disorders, loss of normal motor functions of the pylorus, post-partial gastrectomy, high fiber diet, gastric antisecretory, absence of teeth, tachyphagia [15]. The factors of the trichobezoar are different, particularly psychological: trichotillomania, trichophagia, depression, mental retardation or behavioral disorders [16-20].

We report the same observation in our case, in whom a well-conducted interview enabled us to link the cause of trichophagia to a psychological antecedent, which was not admitted by the patient until after the completion of the esogastroduodenal fibroscopy.

At an early stage, nonspecific digestive signs (pain, nausea, vomiting, foul breath and early satiety) may be associated with weight loss, bald patches, eating disorders or anemia [19,20].

Our study identified almost all the signs listed by these authors [17,20]. These signs were made

up of epigastralgia, early satiety, vomiting, weight loss and alopecia patches.

Biologically, there may be anemia, hydroelectrolytic disorders, hypoalbuminemia as observed in our patient, hyperleukocytosis [2,7].

The esophagogastroduodenal fibroscopy remains the reference paraclinical examination, which can have an immediate diagnostic and therapeutic interest by allowing the endoscopic extraction of small gastric trichobezoars [19].

Unlike our case, gastroesophageal fibroscopy, although sufficient for the diagnosis, did not allow removal of the trichobezoar; because the volume of the piece was larger than the overlying digestive tract.

Abdominal ultrasound only allows the diagnosis to be made in 25% of cases, by visualizing a superficial, hyperechoic, curvilinear band with a clear posterior cone of shadow [20]. The esogastroduodenal transit demonstrates a gastric intraluminal lacuna, mobile, with convex edges, which may have an extension into the duodenum [4]. The transit of the small intestine completes the exploration of the intestine in search of a continuous distal extension or detached fragments [4]. The abdominal CT scan may show a mass of variable volume, heterogeneous, occupying almost the entire gastric lumen and consisting of multiple concentric circles of different densities distributed in onion bulbs. Two pathognomonic and constant signs are the presence of tiny air bubbles scattered within the mass and the absence of any attachment to the gastric wall [20].

Contrary to these authors [4,20], we did not consider it necessary to carry out other examinations for the simple reason that the FOGD allowed the positive diagnosis; which was also the main motivation to make this case a scientific publication, to highlight the value of FOGD in the positive diagnosis of trichobezoar.

We performed a surgical treatment with a transverse gastrotomy and extraction of the piece. This corroborates with the idea reported by Mountassir M. et al. [2] who states that the treatment is usually surgical, and the evolution remains good.

Early diagnosis coupled with rapid surgical management after well-conducted exploration always leads to a simple post-operative follow-up

[2]. This other assertion by Mountassir M. et al. goes in the same direction as our observation in the management of this pathology with a simple post-operative follow-up for our patient.

4. CONCLUSION

The trichobezoar appears as a pathological curiosity, because of its particular nature.

Endoscopy may, for localized forms, be sufficient to make a positive diagnosis. The treatment is surgical. Supportive psychotherapy is an important step for better follow-up and should in no way be underestimated.

CONSENT

As per international standard or university standard, patient(s) written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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