



Case Report

PERITONITIS BY GASTRIC PERFORATION CAUSED BY A GIANT GASTRIC
TRICHOBEZOAR: A CASE REPORT

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ARTICLE INFO

Article History:

Received 10th April, 2019

Received in revised form 2nd

May, 2019

Accepted 26th June, 2019

Published online 28th July, 2019

Key words:

Bezoar, trichobezoar, peritonitis by gastric perforation

ABSTRACT

The gastric trichobezoar is a rare disease with an easy diagnosis when the context is quite evocative. Psychiatric disorders such as trichotillomania (referring to a patient's repetitive behavior consisting on pulling out one's own hair to the extent of removing the hair on entire zones of the scalp, which leads to an obvious alopecia) are frequently the underlying reason in patients without a history of gastric surgery. Bezoars maybe clinically asymptomatic or report chronic abdominal pain, dyspepsia, gastric ulcers, gastrointestinal hemorrhage, perforation due to pressure necrosis, intestinal intussusceptions, and ileus. In this article, we presented a giant gastric trichobezoar case using a peritonitis by gastric perforation in a 35-year-old woman three days after premature birth. She was initially treated with an emergency surgical intervention and the extraction was performed through gastrotomy, without complications. Psychiatric follow-up was recommended.

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INTRODUCTION

The "bezoar" corresponds to accumulation of undigestible foreign substances along the digestive tract, most commonly found in the stomach and proximal portions of the small bowel. Bezoars come in various compositions, even though the forms that are commonly found correspond to the trichobezoars (agglomeration of hair) and phytobezoars (agglomeration of vegetable fibers). Among those patients who are exempt from a history of gastric surgery, the most common underlying pathology is psychiatric disorders such as trichotillomania. The subjects suffering from trichotillomania may play with or ingest the hairs pulled out; this is what is called trichophagia. Bezoars maybe clinically asymptomatic or present with chronic abdominal pain, dyspepsia, gastric ulcers, gastrointestinal hemorrhage, perforation due to pressure necrosis, intestinal intussusceptions, and ileus. Adult mortality rates of up to 30% related to gastrointestinal bezoars have been reported.

We'll be reporting the case of a giant gastric trichobezoar complicated by peritonitis generalized by gastric perforation treated with an emergency surgical intervention, to show the importance of an early diagnosis before the stage of complications especially in the evocative clinical context.

Case Presentation

A 35-year-old female patient, three days after premature birth. During her hospitalization in the obstetrics and gynecology

department, the patient presented generalized abdominal pain with vomiting, abdominal distension, hematemesis with an occlusive syndrome. The body temperature was of 38.5°C. The patient previously had an alopecia with notion of trichophagia during the interrogation. The clinical examination objectified a generalized abdominal tenderness, with abdominal distension with a mobile hard mass at the level of the epigastrium and the right hypochondrium. The biological assessment showed hyperleukocytosis at 25000 /mm³, a hypochromic microcytic anemia at 8 g / dl, a CRP of 347 mg/L. The abdominal CT showed a peritoneal effusion with a pneumoperitoneum, with a giant intragastric mass totally occluding the stomach (Figure 1, 2). The diagnosis of peritonitis by gastric perforation was set; a surgery was performed urgently. The Laparotomy revealed purulent peritoneal effusion of great abundance with multiple false breasts, with a huge intragastric mass causing a perforation in the fundus about 2 cm in diameter (figure 3). After aspiration of the effusion; some samples were sent for a thorough bacteriological study and the perforation site was explored through a sharp and blunt dissection; trichobezoar filling the entire stomach could be observed (Figure 4). The giant trichobezoar mass was removed from the stomach through an anterior gastrotomy, which extended longitudinally from the site of perforation at the fundus. After the debridement of the borders of the perforation, the gastrotomy incision was repaired using double sutures. On inspection, the bezoar mass was a hairball with a smooth surface having taken the shape of the stomach (Figure 4,5). An abundant washing with salted

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serum was carried out with the installation of 2 drain of Redon under hepatic and at the culdesac of Douglas. Oral feeding was started on the postoperative fifth day. The patient was referred to a psychiatrist. Depressive behavioral disorder was diagnosed accompanying trichophagia and treatment was planned. The patient was discharged from our service on the 6th postoperative day with no complications.

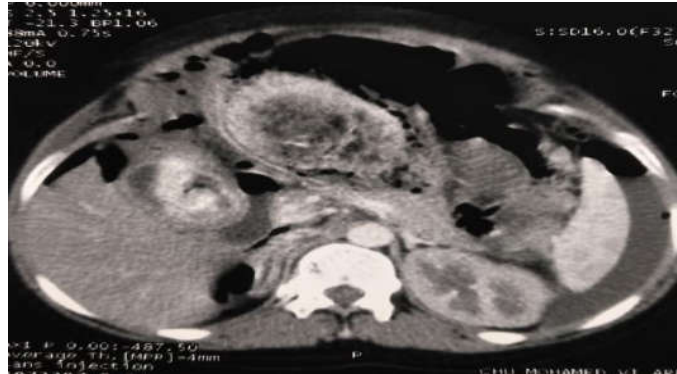


Figure 1 CT scan with a large intragastric mass, with pneumoperitoneum and peritoneal thickening



Figure 2 sagittal scan section showing the huge intragastric mass



Figure 3 the gastric perforation

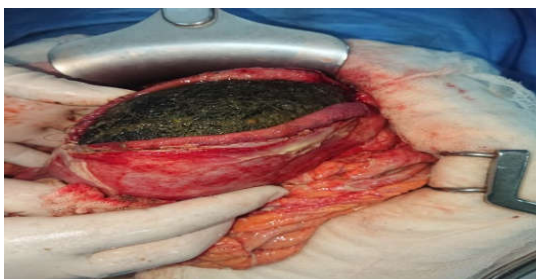


Figure 4 anterior gastrotomy for the extraction of trichobezoar



Figure 5 the trichobezoar taking the shape of the stomach

DISCUSSION

Bezoar corresponds to the unusual accumulation of solid masses in the form of aggregates made of non-digestible substances (hair, plant material, drugs...) stagnating mostly in the intragastric digestive tract. The trichobezoar represents 55% of cases. It is an agglomerate of hair or fibers intermingled with each other and associated with food debris serving most often in the gastric lumen, even though they most frequently form in the stomach and the small intestine (1,2,3,4).

Females are affected in more than 90% of cases and the age of onset is 80% of cases under 30 years of age, with a peak incidence between 10 and 19 years old (5).

The trichobezoar is mostly found in patients with a psychiatric history, the mentally retarded and prisoners who have trichophagia [6].

The trichobezoar may remain asymptomatic for a long time or manifest as a vague epigastric pain (80%), abdominal pain (70%), nausea or vomiting (65%), anorexia with weight loss (38%) or transit disorders (33%) type of diarrhea or constipation (5,7,8).

A complication can be the revelation mode of this pathology [8]. It may be high gastrointestinal bleeding due to parietal ulceration, gastric or gastric mechanical obstruction [9,10], gastric or granular perforation with peritonitis or subphrenic abscess [10,11], a digestive fistula [11,12], cholestasis or acute pancreatitis attributed to an obstruction of Vater's bulb by an extension of the trichobezoar (Rapunzel syndrome) [13-14].

On clinical examination, 85% of cases have an abdominal mass with the following characteristics: it is small, smooth, firm, mobile at the epigastric localization; alopecia or foul breath can also be noted (5,8). In our case the diagnosis was made at the stage of complication. The upper gastrointestinal endoscopy is the examination of choice for the diagnosis of bezoar. The hairball takes the form of an intraluminal mass, made of tangled hair with food debris. On the abdominal CT scan, the trichobezoar appears as an intraluminal heterogeneous mass. Two pathognomonic signs are constant: the presence of air bubbles in the mass and the absence of any attachment to the gastric wall [15]. This examination like any imaging is not necessary to confirm the diagnosis, it has the role to eliminate organic lesion or exclude any secondary complications. Therapeutically speaking, in the presence of small size trichobezoar, some authors propose the use of abundant beverages associated with the process of accelerators of transit, while others suggest an endoscopic extraction. Other authors propose the fragmentation of the trichobezoar,

either endoscopic ally by laser beam and mini-explosion [16] endoscopic extraction can be attempted if trichobezoar small. Excisional surgery ata gastrostomy is indicated for large conglomerates or in case of failure of endoscopic extraction [17]. The presence of a complication (perforation, haemorrhage) always requires surgical treatment [18]. Finally, a psychological treatment of these patients is essential to prevent recurrence [2].

For our patient with a history of trichophagia; who presented abdominal pain with vomiting and an occlusive syndrome the diagnosis of peritonitis by gastric perforation secondary to a huge trichobezoar has been confirmed by the abdominal CT, a decision for emergency surgical intervention without prior endoscopy was made.

CONCLUSION

Thricobezoard is a rare clinical entity that should be mentioned in female subjects who have a particular psychic profile with a variety of clinical syptomatology. The diagnosis must be made before the occurrence of complication. The treatment is mainly surgical with the need for psychological follow-up.

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How to cite this article:

Rabbani K *et al* (2019) ' Peritonitis by gastric perforation caused by a giant gastric Trichobezoar: a case report', *International Journal of Current Medical and Pharmaceutical Research*, 05(07), pp 4383-4385.
