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Case Report

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Gastroduodenal Trichobezoar: A case report and literature review

Josaphat Paluku Katswere[1], Alexis Mupepe Kumb[2], Janvier Rugendabanga Bazibuhe[1], Samson Todalehou[1], Nina Capo-Chichi[3], Azeddine Mohamad Filali[1], Francis Moïse Dossou[4]

1 *Service of general surgery of Auxerre hospital center in France*

2 *Medical technic's institute of Uvira, South Kivu province, Democratic Republic of Congo*

3 *University clinic of Pediatric surgery at the national university hospital center Hubert Koutoukou Maga of Cotonou, Benin*

4 *University clinic of visceral surgery ''B'' at the national university hospital center Hubert Koutoukou Maga of Cotonou, Benin*

Abstract

Gastroduodenal trichobezoar is infrequent. Its diagnosis is easy in the presence of an evocative context. Patients with this condition often have an underlying psychiatric illness and history may not be easily forthcoming. We report a classic case of a 17 year-old patient admitted with acute abdominal pain, vomiting, an upper abdominal mass and anemia. Abdominal computed tomography (CT) scan suggested the diagnosis of bezoar. Surgical removal of trichobezoar by gastrotomy was performed without complications. Preoperative blood transfusion was admitted, the patient was referred to the department of psychiatry.

Keywords: Trichobezoar, Malnourished, Anemia, Gastroduodenal, Trichophagia.

INTRODUCTION

A trichobezoar is a mass of undigested hair within the gastrointestinal tract. [1] In rare cases, it can be about wool coming from the carpets or clothes. [2] Trichobezoar commonly occurs in the children or the young teenagers presenting psychic unrests. [3] We report a gastroduodenal trichobezoar in the general surgery service of Auxerre hospital Center in France.

CASE REPORT

After ingestion since several months of hair, a 17 year-old boy, followed up for a psychiatric disorder since several years, is admitted with acute epigastric pain, vomiting in the surgical service. On questioning, patient reported no trouble of the intestinal transit. Clinical examination revealed a malnourished boy with a fetid breath. The abdomen palpation revealed a mobile and sensitive abdominal mass extended to the right upper quadrant. A frontal bald patch was noted. The laboratory findings revealed an infection syndrome, severe microcytic hypochromic anemia and iron deficiency. Eso-gastro-duodenal fibroscopy and abdominal CT scan confirmed a trichobezoar formed by a hair mass, which filled the entire stomach with extension into the duodenum. (Figure 1, 2) The patient went on to have a medium laparotomy, where a large trichobezoar of 1. 6 kg (Figure 3) was successfully extracted via an anterior gastrotomy incision. He had preoperative blood transfusion and he was hospitalized for 4 days. The patient had an uneventful postoperative outcome and was referred to psychiatry.

DISCUSSION

Trichobezoars commonly occur in adolescent females. [1] The age of intervening is in 80% of the cases inferior to 30 years with a peak of impact between 10 and 19 years. [3] Our male patient is also included in this age group. The gastric localization is the most frequent. As it is in this case, bezoar can extend distally from the stomach into the coecum. Extension of the bezoar from the stomach into the jejunum or further on is referred to as "Rapunzel syndrome," first described by Vaughan J et al. in 1968. [2, 4-6] Bezoars may be classified as trichobezoar, phytobezoar, lactobezoar, pharmacobezoar and metal bezoar. [7, 8] Bezoars are most commonly occurs after gastric surgery. In cases without past surgery, the underlying etiology for the bezoar is usually a psychiatric disorder. The anatomical changes in the gastrointestinal tract are known also to cause bezoar formation. [1, 9]

***Corresponding author:**
Josaphat Paluku Katswere
Service of general surgery of Auxerre hospital center in France
Email:
josaphatpalkat@gmail.com

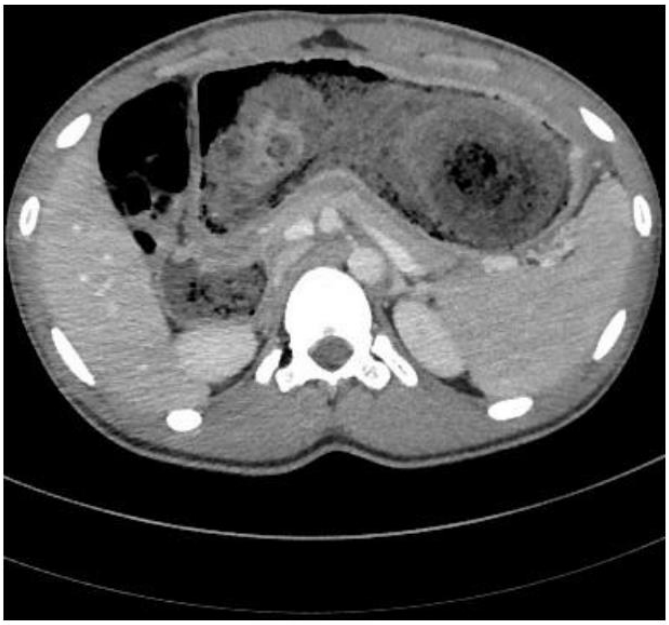

Figure 1: Abdominal CT scan with use of orally administered contrast medium

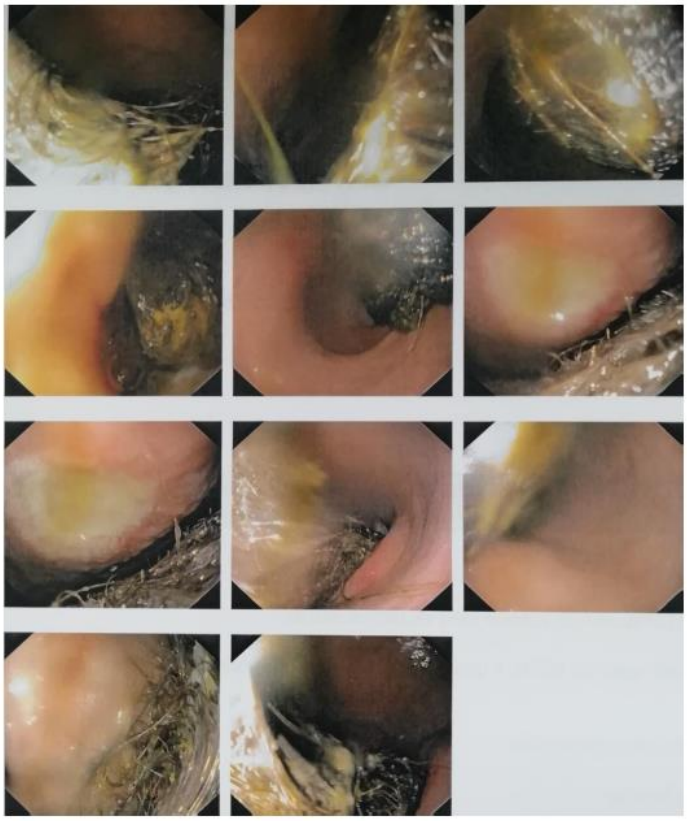

Figure 2: Endoscopy demonstrating trichobezoar

The classic encouraging factors are gastric dysmotility, the loss of the normal motor functions of the pylorus and some substances encouragese stickiness and concretion formation in the stomach lumen. [10, 11] This affection, as it is in this case, can be asymptomatic for a long time, which explains the delay of the diagnosis. Later, it can cause symptoms such as chronic abdominal pain, stomach ulcer, perforation, stomach bleeding, intussusception, obstruction, [9, 12] also an anemia or malnourished. The treatment consists of the removal of this indigestible mass. In the literature several treatment options are proposed, including non invasive techniques such as medical treatment and enzymatic dissolution or removal by laparoscopy and endoscopy but the success rate was low because of the difficulties in removing especially large trichobezoars. As it is in this case, laparotomy, on the other hand, was the important treatment option due to its advantages such as shorter duration of operation, simplicity of the procedure, low complication rate and successful result. [4, 10, 13- 16] Thus, the prognosis could be better if psychiatric therapy to control habitual trichophagia or correction of disorders related to this pathology are successful. [17]

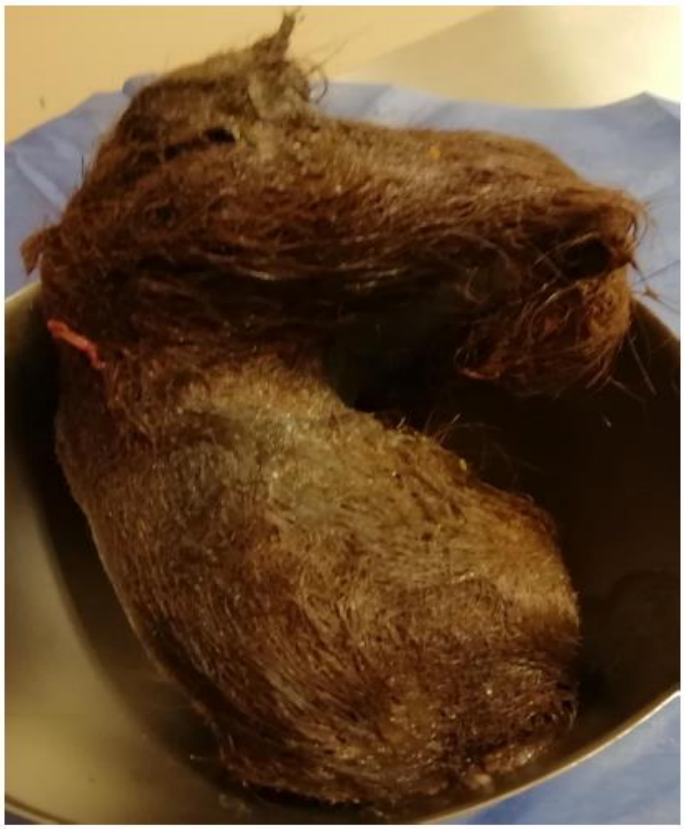

Figure 3: Surgically extracted trichobezoar via a gastrotomy

CONCLUSION

Trichobezoar involves both sexes. The consequences are known to be severe. The diagnosis is often endoscopic and radiologic. Conventional laparotomy is still the treatment of choice for large bezoars, whereas laparoscopic and endoscopic procedures should be preferred for smaller ones. The management of its consequences must accompany chirurgical acts. In addition, psychiatric consultation is necessary to prevent relapses.

Conflict of Interests: The authors declare no conflict of interests.

Author's contribution:

- Josaphat PALUKU KATSWERE: acquisition of data, drafting the case report.

- Alexis MUPEPE KUMBA, Janvier RUGENDABANGA BAZIBUHE, Samson TODALEHOU and Nina CAPO-CHICHI: Revising it critically for important intellectual content.

- Azeddine MOHAMAD FILALI and Francis Moïse DOSSOU: final approval of the version to be published.

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