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A RARE CAUSE OF OBSTRUCTIVE ACUTE ABDOMEN: JEJUNAL PHYTOBEZOAR

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Abstract: Bezoars are concretions of non-digestible organic material in the lumen of the gastrointestinal tract (GIT), which can be classified into different types, according to their composition. Although rare, they constitute a possible cause of GI tract obstruction. It is a difficult condition to diagnose and, in most cases, occurs incidentally, requiring high clinical suspicion. The treatment is essentially surgical. Among the risk factors for this condition, abdominal surgeries, mainly gastric, seem to have implication in its pathogenesis. Such knowledge could help in the detection and facilitate the diagnosis, with earlier treatment and, therefore, better prognosis of patients treated for this condition. **Objective**: To evaluate data in the literature on intestinal obstruction by bezoars, its diagnostic and therapeutic approach and the association with previous gastric surgery. **Methodology**: Literature review using mainly the descriptors intestinal obstruction and bezoar, in the Scielo, LILACS, PubMed databases, delimiting findings between 2010-2022, in Portuguese and English. **Conclusion**: The possibility of a bezoar as a cause of obstructive acute abdomen must be considered mainly in elderly patients with previous gastrectomy, with clinical examination and imaging tests, in association with clinical and dietary history, of great importance for the diagnosis and resolution of the condition. to ensure a better prognosis for these patients.
Keywords: acute abdomen; bowel obstruction; phytobezoar; post gastrectomy; elderly.

INTRODUCTION

Bezoars are abnormal concretions of indigestible organic material in the lumen of the gastrointestinal tract. They can occur anywhere in the stomach, being more common in the stomach. Phytobezoars are composed of agglomerates of plant fibers and, although rare (incidence of less than 4% in the literature), they are a possible cause of gastrointestinal mechanical obstruction. They have an increased incidence in patients undergoing abdominal surgeries, mainly gastric. Initially, clinical treatment for obstructive acute abdomen may be attempted. If refractory, surgical treatment is indicated. In this report, we present a case of jejunal obstruction by phytobezoar, refractory to conservative treatment, in a patient who underwent gastrectomy with Billroth II reconstruction due to perforated peptic ulcer. We aimed to evaluate data in the literature on intestinal obstruction by bezoars, its diagnostic and therapeutic approach and the association with previous gastric surgery. We also emphasize its potential severity, given the negative outcome.

CASE REPORT

GCF, male, 71 years old, with SAH, DM and CAD, sought emergency care with diffuse abdominal pain, worse upstairs, abdominal distension, nausea and vomiting for 3 days. Patient already submitted to exploratory laparotomy due to perforated peptic ulcer 40 years ago, being performed distal gastrectomy and Billroth II reconstruction. On examination, the patient was stable and with a good breathing pattern, with a distended abdomen, hypertympanic and painful on diffuse palpation, it being possible to palpate intestinal loops on the upper floor, without signs of peritoneal irritation. Laboratory tests upon admission showed elevated CRP and absence of hydroelectrolytic or acid-base disturbances. An abdominal tomography with venous contrast was performed, which showed significant liquid distension of the stomach and loops of the small intestine upstream of the jejunal segment with fecalized content in the upper hemiabdomen R, with an abrupt reduction in the caliber of the loop downstream (bridle?) - compatible aspect

with intestinal semi-obstruction. There was no report of ingestion of excessive food or non-food materials, nor previous psychiatric history. Conservative treatment was initially chosen due to the patient's stability and diagnostic hypothesis of adhesions, with the passage of a large-caliber nasogastric tube, analgesia, serum regimen and the patient fasting. The patient evolved with improvement, with elimination of flatus and evacuation after 6 days of hospitalization, when he was discharged in good condition. He sought the emergency service again 2 days after hospital discharge, presenting a similar condition to the previous one, without new bowel movements or elimination of flatus since discharge, but without vomiting. A new abdominal tomography was performed, this time with oral contrast, which showed signs of semi-obstruction in the small intestine, in the topography of the mesogastrium, where an elongated image with a fecaloid appearance (bezoar?), measuring 4.2x6. parietal thickening in this topography and extensive liquid distension of upstream and stomach loops. With this, the surgical approach of the patient was defined, being submitted to exploratory laparotomy, with identification of foreign body in the distal jejunum compatible with bezoar, with great dilation upstream. Enterotomy was performed and the bezoar removed, followed by enterorrhaphy with 3-0 prolene in 2 planes. The patient evolved with hemodynamic instability at the end of the surgery, requiring the initiation of low-dose amines and he was referred to the postoperative ICU. Anatomopathological result identified plant etiology of foreign body. The patient initially evolved with hemodynamic and clinical improvement, with elimination of bowel movements and resumption of enteral diet with good tolerance. Subsequently, he had several complications associated with fungal sepsis, progressing to an ischemic stroke with hemorrhagic transformation and death due to brain death on the 21st POD. Anatomopathological result identified plant etiology of foreign body.

DISCUSSION

Phytobezoar is the most common subtype of bezoar and many factors are involved in its formation, such as previous gastric surgery, as it can cause gastric motility disorders secondary to vagotomy or by promoting pyloric exclusion. Other factors, such as a fiber-rich diet, inefficient mastication, intestinal diseases, advanced age and intestinal dysmotility also play an important role in pathophysiology. The patient in the case in question underwent previous gastrectomy without pyloric preservation, which converges with the data found in the literature.

The clinical picture can range from asymptomatic to nonspecific symptoms of obstructive acute abdomen, making the diagnosis a challenge in clinical practice. Anamnesis, mainly dietary history and previous surgeries, and physical examination are important for the diagnosis. However, complementary imaging tests are necessary for a definitive diagnosis, which is often only done intraoperatively. Plain radiography and abdominal tomography are the most practical and useful tests. The first for findings compatible with obstruction (air-fluid level and loop distension) and the second for allowing better identification of the obstruction site and differentiating possible obstructive causes. A high index of suspicion is fundamental when requesting an imaging exam, as they can be confused with feces from the intestine. A common description of a phytobezoar is an ovoid intraluminal mass, but it can present in a variety of ways.

Initially, clinical treatment can be effective; however, a surgical approach often becomes necessary. Abdominal exploration can be

performed via laparotomy or laparoscopy. Manual fragmentation followed by milking can be tried and, when this fails, the bezoar can be extracted by enterotomy (as was done in the patient in this report) or even segmental resection in the presence of complications (perforation or necrosis).

Rarely can bezoars be treated non-operatively. Coca-Cola dissolution for gastric bezoars, endoscopic removal with or without fragmentation, and small bezoars removed with intestinal enemas are methods that can be tried.

Although rare, the possibility of bezoar must be considered, especially in elderly patients with previous abdominal surgeries, mainly gastrectomy. The present case teaches us that, in the case of phytobezoar, it is necessary to evaluate the anamnesis together, mainly dietary history and previous surgeries, clinical examination and imaging tests. Perhaps the diagnosis of phytobezoar could already have been made in the first hospitalization, if all these elements had been better evaluated.

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