

Ileal Occlusion on Bezoars at Kati BSS Hospital

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Abstract

Bowel occlusions by bezoars are rare pathologies. They are due to an obstruction of the intestinal lumen by a solid mass of fruits or undigested vegetable fibers. They are seasonal (wild fruit season from March to June) in the Sahel Zone. We report a case of small bowel obstruction in a 35-year-old rural man after swallowing a significant amount of wild grapes (*Lannea microcarpa*). We proceeded to the resection of the occluded ileal segment and performed an ileal terminal ileal anastomosis. There weren't any complications during the postoperative site.

Keywords

Bezoars, Occlusion, Jejunum, Season

1. Introduction

Bezoar is a solid mass of undigested fruit, grain of fruit or vegetable fiber, obstructing a segment of the digestive tract [1]. It is a rare etiology of intestinal obstructions [2] [3]. If the trichobezoar is seen in patients with psychic troubles [4], the phytobezoar is generally also found in those with an antecedent digestive surgery [2]. The treatment is essentially surgical. This observation finds its interest in the fact that the patient had not any particular antecedent. We report a case found in the General Surgery Department of Kati SBB CHU.

2. Observation

He was a 39-year-old man with no particular history, who was received an emergency for painful abdominal distension, like cramps with early postprandial

vomiting. The symptomatology evolved for two days with stopping of materials and gases. On anamnesis, the patient reported having swallowed a large quantity of wild grapes (*Lannea microcarpa*) two days earlier. After swallowing, this symptomatology began. In Africa, in the savannah zone, the fruits of *Lannea microcarpa* mature from March to April. These fruits are widely swallowed by people during the dry season. At the arrival of the patient, we noted a blood pressure of 110/80 mm Hg, an arterial pulse at 99 beats per minute, good mucosal staining. On clinical testing, we observed a weak symmetrical abdominal meteorism with intermittent peristaltic ripples. There was no laparotomy scar. On palpation, the patient showed a painful and generalized abdominal defense with a shriek of the umbilicus. Abdominal percussion was noted with umbilical tympanism. Orifice hernias were free and the ampulla Rectal was empty in rectal testing with a non-convex, non-painful Douglas. The rest of the somatic testing has not any particular sign. Abdominal X-rays without preparation of the abdomen were observed to have central, higher-than-wide, central hydroaerative levels plotted for hail occlusion (**Figure 1**). The biological assessment was normal out of a prothrombin rate of 52% (Standard > 70%). We proceeded to a medial laparotomy under and above the umbilical. During the exploration, the patient had a hard, elongated, intraluminal mass that obstructed the ileum (**Figure 2**). The obstructed area had a depitonized inflammatory aspect. The obstruction was located 40 cm from the ileocecal junction. The rest of the ileum was normal. A short ileotomy revealed a solid mass of undigested wild grapes (**Figure 3**). We proceeded to an ileal resection with 30 cm of the occluded ileum and an ileal-ileal anastomosis. The postoperative result was simple.

3. Discussion

Bezoar is a concretion of plant fibers (orange pulp, coconut, figs...) that forms in the gastrointestinal lumen [5]. The origin of this term is still unknown, it derives from Persian padzar, Arabic bedzher, Turkish parzehir meaning antidote [6].

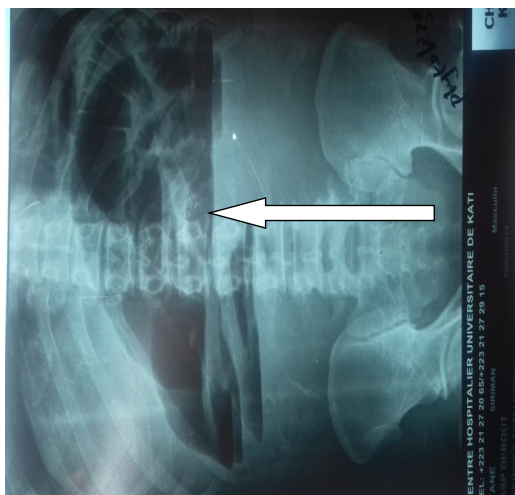


Figure 1. X-ray of the abdomen without preparation.

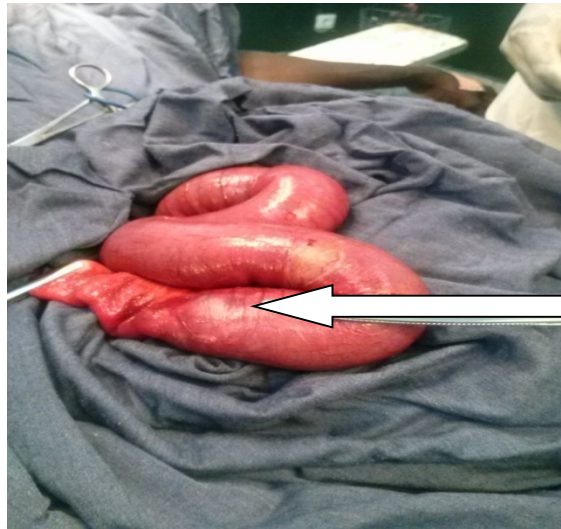


Figure 2. Intraluminal mass, hard, elongated.

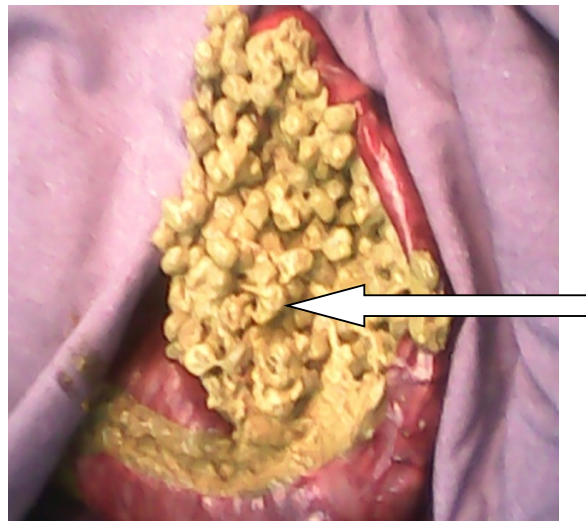


Figure 3. Intra-ileal *Lannea microcarpa* grains obstructing the ileum.

Formerly bezoars extracted from the stomach of goats were used in the treatment of numerous diseases (epilepsy, leprosy...) [7]. It is a rare cause of intestinal obstruction in human beings [1] [2] [3]. Trichobezoar (concretions of hair, carpet fibers) mainly obstruct the stomach, according to Laraja RD [8] plant debris are responsible for 2.9% of obstructive occlusions. Coll [9] observed that 56% of patients suffered from intestinal occlusions by bezoar had an antecedent gastrointestinal surgery and more particularly gastrectomy with gastroduodenal anastomosis. Our patient had not any antecedent digestive surgery. The wild grape (*Lannea microcarpa*) is a popular fruit well liked by the rural people in the savannah areas of West Africa (Mali, Burkina Faso, Niger and Senegal). According to Rakotova M [2], in Madagascar, Khaki, another wild fruit that is responsible for intestinal occlusions by bezoar. Note that the fruits of wild grapes *Lannea microcarpa* give hard walnuts, not digestible covered with a soft but

sticky flesh. Once swallowed, the grains tend to clump against each other to form an opaque mass. As BALIAN [10] said: the symptomatology is vague dominated by abdominal pains, constipation, abdominal meteorism, early post-prandial vomiting, stopping of materials and gases later. The diagnosis of occlusion of the small intestine by bezoar is generally made intraoperatively because in our countries, it is the radiography of the abdomen without preparation that we often have. On the other hand, the scanner will be a very valuable contribution [3]. We performed the immediate anastomosis resection in our patient. If conventional surgery is the only alternative in the advanced intestinal localization of bezoar, the authors [2] [10] [11] reported some cases of chemical dissolution by acetylcysteine, papain or cellulose or Coca Cola. If surgical removal by enterotomy or antegrade emptying is often possible [3], we proceeded to an ileal-ileal anastomosis resection, considering the inflammatory aspect of the loop. We did not find any other phytobezoar location sites in the patient. After one year and six months of decline, the patient was doing well.

4. Conclusion

Intestinal obstruction by ingestion of wild-type (*Lannea microcarpa*) is rare. It seasonally happens in Africa. Chemical dissolution is an alternative but surgery remains the only sentence in advanced forms.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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