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An Inahbitual Etiology of Acute Intestinal Obstruction: The Giant Fecalome

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Abstract

The authors report an observation of a 20-year-old patient, who was referred by the medical emergency department for abdominal distention. The disease would have started with the appearance of abdominal pain, a stop of materials without stopping gases appeared gradually and evolving for 4 months. The patient was chronically constipated. She administered daily enemas with homemade products to have a bowel movement. She never had rectal bleeding, there was no alteration diarrhea—constipation. Mother of 3 children alive and apparently healthy. On clinical examination the abdomen was enlarged in size, painless but of firm consistency. The hernial orifices were free. Hard and abundant stools were noted on digital rectal examination. The abdominal CT scan revealed a large endorectal fecal impaction going up into the left colon, an absence of abdominal mass. We retained the diagnosis of giant fecal impaction. The patient was hospitalized and we instituted paraffin oil therapy combined with an evacuator enema with glycerin. The evolution was marked by a resumption of transit in the form of stool and gas (3 to 4 stools per day). At Day 8 of hospitalization the abdomen had decreased in volume the transit was regular and the patient was discharged on Day 10. Reviewed 3 months later, she maintained a regular transit made of one bowel movement a day. After a setback of 3 years the transit is still preserved. The authors discuss the etiologies of fecal impaction and their respective treatments.

Keywords

Intestinal Obstruction, Giant Fecal Impaction

1. Introduction

Acute intestinal obstruction is defined as a cessation of intestinal transit. It is

very often of mechanical origin either by obstruction or strangulation which is by far the most frequent etiology [1]. Mechanical obstruction occlusions following a giant fecal impaction have rarely been described [2]. Pathology is common in the elderly but can occur at any age with various etiologies. Treatment is most often conservative [3]. We present here the case of a young lady constipated chronically through which, we will present the different etiologies and treatment of fecal impaction.

2. Our Observation

A young lady of 20 years housewife, who was referred by the emergency medicine for abdominal distension. The disease would have begun the appearance of abdominal pain, a stop of materials without stopping gases appeared gradually and evolving for 4 months. The patient was chronically constipated living in rural areas. The constipation did not go back to childhood, but to 4 months and required him to administer daily enemas with homemade products to have a bowel movement. Despite this, she did not defecate properly. During the 4 months that the symptomatology lasted she did not consult a health center. She has never done rectorrhages. She is the mother of 3 children alive and apparently healthy. She has no known pathology and treatment whose drugs could cause a slowdown in intestinal transit. At the clinical examination carried out on November 27, 2013 in the surgical emergency, the temperature was 37˚C, the blood pressure 100/60 mmHg, and the general condition was little altered. The tongue was saburral, the abdomen breathed little with a significant asymmetrical meteorism with signs of struggle (**Figure 1**). The abdomen was renitent, painless and tympanic. The hernial orifices were free. Hard and abundant stools were noted on digital rectal examination.

A picture of the abdomen without face preparation showed no hydroaeric image and an absence of pneumoperitoneum but a granita of the entire abdomen descending into the small pelvis (**Figure 2**). An abdominal ultrasound revealed significant aerocolia with dilated loops with intestinal struggle in places. The abdominal CT scan highlighted a volvulus of the sigmoid on inflammatory sigmoiditis with voluminous endorectal fecal impaction, an absence of intestinal suffering and an absence of objectivable tumor mass (**Figure 3**). There was microcytic hypochromic anemia at 8 g/dl and hyperleukocytosis 13,000/mm^3. Blood glucose (1.16 g/l) and renal function (uremia: 0.35 g/l, serum creatinine: 10 g/l) were normal. The blood ionogram was normal, sodium: 135 meq/l, potassium: 4.1 meq/l and chlorides: 104 meq/l.

We hospitalized the patient for 10 days and instituted a paraffin oil treatment three times a day combined with an evacuator enema with glycerin at least three enemas a day. At D8 of hospitalization the meteorism had clearly regressed (**Figure 4**). We got it out on J10. Reviewed 3 months later, she maintained a regular transit made of one bowel movement a day. After a setback of 3 years the transit is still preserved.

Figure 1. Abdominal meteorism with signs of struggle.

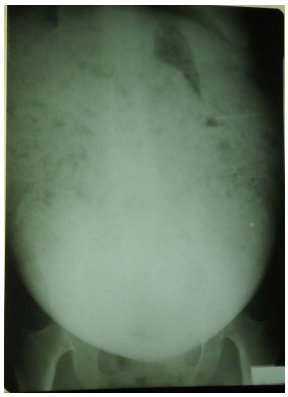

Figure 2. ASP showing a granita of the entire abdomen.

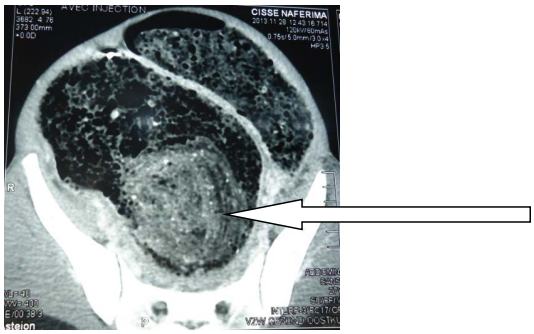

Figure 3. Giant fecal impaction on a horizontal section scanner.

Figure 4. Flat abdomen after medical treatment.

3. Discussion

Fecal impaction is a pseudotumor made of impaction of stool accumulated more or less dehydrated in the colonic and rectal lumen, it is rarely a cause of acute intestinal obstruction [1] [2]. The diagnosis of fecal impaction should prompt the search for these potential multiple causes described in the literature [4] [5]. The most described are chronic constipation. It is the consequence of repeated constipation [6], it is encountered especially in the elderly or bedridden [6] [7]. Thesebedridden patients with immobility due to neurological or traumatic consequences (with spinal cord injury), particularly if superimposed by insufficient fluid intake, dehydration, or administration of drugs that decrease gastrointestinal tract motility [7]. But also occurs in young patients, especially female subjects of childbearing age, as is the case in our study. Cases have also been described in children [2] [6].

We also have patients with neuro-psychiatric disorders, it is due to antipsychotic, anticholinergic, tricyclic and antiserotonnergical drugs [2] [7]. Who are they at high risk of developing fecal impaction.

Some no less common but described such as intestinal tuberculosis, idiopathic megacolon, previous intestinal surgeries, anorectal malformations, ingestion of a number of substances such as anti-cholinergic drugs, narcotics, especially opiates; high doses of tranquilizers [4] [5]. And patients with damage to the autonomic nervous system in the large intestines associated with Chagas disease causing a megalon (chagasic megalon) or Hirschprung's disease, which is more common in children. [2] [6]. The Giant Fecalome is relatively rare in adults.

In our patient apart from her chronic constipation we find no other factor.

Fecal impaction is usually found in the sigmoid colon or rectum due to the gradual hardening of the stool as it passes through the gastrointestinal tract [4]. But the accumulation of stool can extend beyond the rectosigmoid reaching the cecum, rare but described seat and achieve a giant fecal impaction [4] [8] [9].

Fecal impaction is much harder in consistency than fecal impaction and can cause a mass effect that compresses adjacent anatomical structures, leading to life-threatening complications unless treated appropriately [7].

They are sometimes responsible for various compressive complications including nerve compression by compression of the sacral nerves with the appearance of perineal sensory disorders and vascular by extrinsic compression of the iliac vein which increases hydrostatic pressure in the lower limb (leading to edema of the leg) and promotes venous stasis that places the patient at risk of deep vein thrombosis deep vein thrombosis. Ureter compression with secondary hydronephrosis and obstructive nephropathy have been described [6] [7].

They also perforative type including a case of double colonic perforation following a fecal impaction described by Lebeau *et al.* [8]. And also occlusive, the most frequent complication. As is the case with our patient.

The diagnosis can be facilitated by a history of constipation and abdominal pain or even paradoxically diarrhea. This diarrhea would probably be due to an

inflammatory process secondary to the obstruction [4].

But the diagnosis of fecal impaction is usually made radiologically from a characteristic intraluminal mass observed on standard radiographs, barium enema radiography and abdominal-pelvic CT which is today the reference examination. Imaging also plays an important role in differential diagnosis. Typically, fecal impaction can be treated by conservative methods such as laxatives, transrectal enemas and manual evacuation. Polyethylene glycol (PEG) is the gold standard for fecal disintegration, it is an osmotic laxative that sucks water into the colon to soften the stool [2] [7].

In cases refractory to conservative methods, an endoscopic balloon dilation approach to remove fecal impaction has also been described [7] [9].

However, in case of complications including colonic perforation or failure due to conservative treatment surgery namely colectomy may be necessary [6] [8]. It is associated with the treatment of the cause.

Our patient was treated with paraffin oil, given the absence of complications.

The evolution is favorable when the diagnosis is made early most often as is the case with our patient.

4. Conclusion

Fecal impaction is a rare pathology but the cause of many complications including acute intestinal obstruction. Treatment apart from complication is essentially conservative. Our patient was seen early, which probably explains the absence of the various complications caused and the favorable evolution by evacuator enema.

Conflicts of Interest

No conflicts of interest.

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