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Occlusion of the small bowel on a virgin abdomen: Case report

Ameliyatsız karın vakasında ince bağırsağın tıkanıklığı: Olgu sunumu

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Abstract
Peritoneal flanges on virgin abdomen are of uncommon etiology of occlusive syndrome. In particular, congenital bridles represent 0.7 to 2% of small bowel and colon occlusions, from all causes. We report a case of a pelvic occlusion in a 22-year-old patient.
Keywords: Occlusion, Virgin abdomen

Öz
Ameliyatsız batındaki peritoneal flanşlar tıkayıcı sendromun nadir bir etiyolojisidir. Özellikle, konjenital bridler, tüm nedenlerden % 0,7 ila % 2 ince bağırsak ve kolon oklüzyonunu temsil eder. Biz 22 yaşında bir hastada pelvik oklüzyon olgusunu sunuyoruz.
Anahtar kelimeler: Oklüzyon, Ameliyatsız karın

Introduction

Acute intestinal obstruction (AIO) can be functional due to peristalsis disorders related to the disruption of the motor nervous system of the intestine, more often paralytic than spasmodic. AOI can also be mechanical by obstruction, necking or strangulation. These last two AOI mechanisms, especially in adults, are most often secondary to postoperative flanges and / or adhesions [1-3].

However, these flanges and adhesions may occur in patients who have no history of laparotomy [4]. In these cases they are either congenital or spontaneous or initial. Congenital flanges and adhesions are due to abnormal adhesion of peritoneal leaflets during embryogenesis or to an abnormality of the omphalo-mesenteric duct [4]. They are said to be spontaneous or initial when they occur in persons who have no history of abdominal surgery or congenital anomalies, nor any other obvious inflammatory site of interest to organs of the abdominal cavity [5].

Case presentation

Patient aged 23 years without significant antecedents pathologies admitted to the emergency for stopping matter without stopping gas accompanied by vomiting all evolving in a context apyrexia and conservation of the general state. Patient's examination revealed stable hemodynamic and respiratory functions and normal colored conjunctiva. The abdominal examination showed no scar laparotomy, abdomen distended, tympanic but flexible.

The hernia orifices were free to rectal touch stool trace. An X-ray of the abdomen without preparation showed typical hydroaeric levels. A realized abdominal computed tomography (CT) which spoke of appearance in favor of a volvulus of the grele with a distension of the grelic handles of upstream reaching 5cm (Figure 1). The patient was operated by median laparotomy with the presence of extensive grelic distension upstream of a flange performing a grelike volvulus (Figure 2). We performed resection carrying the volvated part (Figure 3) with the completion of a manual terminal grelogrelic anastomosis. Patient declared outgoing four days postoperative without complications.

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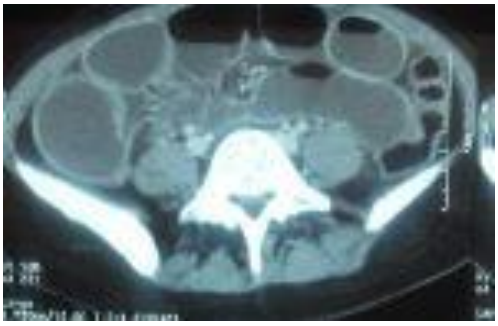

Figure 1: Abdominal computed tomography of the case

Figure 2: Operation view of the intestine showing a grelike volvulus

Figure 3: Resected specimen

Discussion

Congenital bridles are an infrequent pathology of small bowel occlusions, they represent about 0.7 to 2 small bowel and colon occlusions, all causes combined. Congenital bridles are of two types according to:

Lorimier [6] stated that either a persistence of the omphalo-mesenteric canal that has not completely invoked but persists in the form of a fibrous tract, a remnant of vitelline vascularization. Involution of the omphalo-mesenteric duct forms a bridle to the anti-mesenteric edge of the terminal small bowel, either free in the peritoneum or attached to the umbilicus or any other intra-peritoneal viscus. The most common complication is hail volvulus. Lorimier [6] also recalls that among the congenital etiologies, there are omental malformations real bridles called Ladd flanges. They are happy associated with other congenital anomalies including the ring pancreas and mesentery common. None of these situations were found in our case. What made us remember the origin "Spontaneous" or rather initial of this flange?

Very few studies are concerned with initial flanges. Clinical signs are often marked by premature vomiting and stopping of material without stopping gas. X-ray of the abdomen without preparation in the standing or lateral decubitus position was considered gold-standard. This quick and inexpensive examination can confirm the diagnosis of occlusion in more than half of the cases. The main signs observed are a small distention, hydro-air levels and possibly free intra-abdominal fluid by erasing the contours of the psoas-iliac muscles. In a context of acute occlusion of the loess, the sub-diaphragmatic free air image is pathognomonic of perforation and is an indication for urgent surgery [7,8].

X-rays can sometimes reveal the etiology of the occlusion episode, such as biliary ileus or the presence of a foreign body. This examination, however, has its limitations and is not very sensitive for assessing the presence of ischemia or small necrosis. Although the place of abdominal radiography is questionable in the event of an emergency abdominal CT scan, the literature recommends it as the initial baseline examination for screening and selection of patients requiring CT scan [7,8].

CT-scan has become an almost unavoidable examination in the evaluation of patients with suspected hail obstruction. It answers the questions of the presence of an occlusion, its location, its cause and the severity of the attack with a sensitivity of 90 to 96% and a specificity of 96% [9,10]. This examination indicates in the first place the presence of dilated proximal loops and loops of normal diameter or collabées. There is also a local risk, that of necrosis or intestinal perforation resulting from mechanical ulcerations (ileus biliary) or parietal ischemia, either on the obstacle (flange, strangulation, volvulus) or upstream of the obstacle (diastatic perforation due to gas distension).

The primary flange occlusion treatment is surgical. It may consist of a simple section of the flange or a resection of the part responsible for occlusion with a termino-terminal grelogelic anastomosis as was our case.

Conclusion

Occlusion on bridles or spontaneous adhesions is observed in young patients without any history of laparotomy, presenting with a table of free occlusive syndrome. It is only during laparotomy that the spontaneous or initial etiology of the flanges is observed. The flange is often unique. Morbidity and mortality are negligible due to early surgery guided by good medical resuscitation.

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