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INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI:10.21474/IJAR01/11122

DOI URL: <http://dx.doi.org/10.21474/IJAR01/11122>



RESEARCH ARTICLE

UNUSUAL CAUSE OF INTESTINAL OBSTRUCTION

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Manuscript Info

Manuscript History

Received: 07 April 2020

Final Accepted: 10 May 2020

Published: June 2020

Key words:-

Polyp, Intussusceptions, Small Bowel

Abstract

Acute adult intestinal invagination is rare and often secondary to an organic lesion. It accounts for less than 5% of AIOs in adults. Grelic invagination on polyp is exceptional. We report a case of grelo-grelic polyp invagination in a 19-year-old male. The clinical presentation was that of an occlusive syndrome. The abdominal scanner confirmed the occlusion, specified its seat. The procedure consisted of a resection of 12 cm with the invagination collar and termino-terminal anastomosis. The anatomopathological examination confirmed the diagnosis of a benign tubular adenoma type tumour in low-grade dysplasia.

Conclusion: Acute intestinal occlusion by grelic invagination on polyp is rarely encountered in adults. Its symptomatology is non-specific. Its diagnosis is facilitated by abdominal computed tomography. Surgical excision is the treatment of choice.

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Introduction:-

Acute intestinal invagination is defined as the penetration or telescoping of an intestinal segment in the one immediately downstream. This is a common condition in children, whereas rarely found in adults [1]. It accounts for only 1-5% of the aetiologies of intestinal occlusion; in adults an organic cause is found in 70-90% of cases, but in children it is most often idiopathic. Its evolutionary mode is chronic or subacute [1]. We report a case of graft intestinal invagination secondary to an intraluminal polyp.

Observation:-

19-year-old patient, no specific antecedent, admitted to the emergency department for occlusive syndrome that dates from 3 days with peri umbilical abdominal pain, nausea, vomiting and inability to pass gas and stool. The physical examination found an afebrile patient, blood pressure : 13/7 cmhg, pulse: 83 b / min. distended abdomen with tympanism on percussion, the hernia orifices were free. Rectal touch was normal. The biological assessment was without abnormalities with leukocytes at 9500 element / mm, hemoglobin at 13 g / 100 ml, blood urea at 5.6 mol / prothrombin rate at 96%.

Abdominal X-ray demonstrating a small bowel obstruction, with multiple air fluid levels. And was completed by abdominal CT, which objectified an acute intestinal obstruction secondary to intussusception. (Figure 1)

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Figure 1:- Abdominal CT: objectified an intestinal obstruction.

It was decided to operate the patient in emergency with the diagnosis of acute intestinal obstruction secondary to ileocolic invagination, surgery performed by a medial laparotomy straddling the umbilicus, it confirmed the presence of the small bowel intussusception, the downstream bowel was flat whereas upstream it was dilated, the patient underwent a 12 cm resection of the small intestine carrying the invagination. with termino-terminal anastomosis. The macroscopic examination of the operative specimen found a polyp (figure 2). The histological study returned to favor a tubular adenoma in low grade dysplasia. The postoperative course was simple with a good clinical evolution.



Figure 2:- Small bowel with intussusceptions.

Discussion:-

Intestinal intussusception accounts for less than 5% of intestinal occlusion etiologies in adults, an organic cause is found in 70-90% of cases, whereas in children intussusception is primitive in 90% of cases . [2-3].

This condition is very rare in developed countries, but on the contrary it is relatively common in Africa. The reasons for these geographical differences are unknown and some factors such as dietetics and parasites are mentioned [4]. there is no predominance related to age or sex; even though the average age of the various published series is between 40 and 50 years old, with extremes ranging from 15 to 81 years old [5, 6].

The positive diagnosis of this condition is difficult and most often done intraoperatively in front of an occlusion chart. It is frequently manifested by non-specific signs of episodic onset, favoring diagnostic delay; more rarely, it is manifested by an acute syndrome related to occlusion or perforation. Differential diagnoses, which can lead to intussusception, include malignancy (adenocarcinoma, lymphoma and metastases), inflammatory lesions, Meckel's diverticulum, postoperative adhesions, lipomas [7,8]

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In adults, the clinical presentation is polymorphous and misleading, we find: an acute occlusive table, subocclusive table, non-specific abdominal syndromes (transit modification, diffuse abdominal pain, digestive bleeding?), Evolving sometimes for several months [9] . ,

The classic triad is rarely seen: abdominal pain, a palpable mass, and bloody stools [10,11]. The most common symptom is abdominal pain with symptoms of partial obstruction: nausea, vomiting, digestive bleeding, changes in bowel habits, constipation, or bloating. [11,12]

On examination Finding an abdominal mass is an important sign. We will look for the corresponding swelling of the invagination coil carefully in the right and left lateral decubitus, supine and in the Trendelenburg position [13].

Palpation under general anesthesia before the operation has often allowed the detection of an abdominal mass hitherto not perceived, maneuver not to neglect because it simplifies the surgical exploration. The abdominal mass corresponding to the invagination coil is present in 24 to 42%, but its frequency remains variable according to the series, because of its fleeting character [5, 2, 6]. It should be noted that the mass corresponding to the invagination coil must not be confused with a mass related to the etiological condition (malignant or benign tumor).

Whatever the initial clinical presentation, the diagnosis is mostly done by imaging, more rarely by exploratory surgery.

The radiography of the abdomen without preparation (ASP), a grelogrelic invagination can be suspected in front of a homogeneous opacity rounded of water tone circumscribed on one side by a clear crescent and which can contain within it clear arciform images which give it an aspect in "coil spring" [14].

On the abdominal ultrasound, the typical signs of the invagination pudding correspond to the visualization of the successive layers of digestive walls of the invaginated coves and the receiving loop, with the mesenteric fat carried by the invaginated handle in the center. the image is a cockade, made of a rather hypoechoic peripheral crown consisting of several digestive layers and comprising an eccentric hyperechoic crescent corresponding to the incarcerated mesentery [15]. In longitudinal section; the so-called sandwich image corresponds to the succession of hypoechoic digestive wall layers with respect to the more central and hyperechoic mesenteric fat. The zone of penetration of the invaginated loop into the receptive loop can be perfectly visualized [15].

Doppler ultrasonography may reveal the disappearance of venous and arterial hyperemia from the invagination coil suggestive of ischemic necrosis [16, 17].

Abdominal computed tomography is the exam of choice in adults. it allows to diagnose the obstructive syndrome, its mechanism, in this case, the intussusception, its precise location and to show its cause (intraluminal or luminal mass). The body of the invagination is in the form of multiple hypo or hyperdense concentric rings, giving a cocarde or target appearance on the frontal sections and sandwiching on the cross sections [14, 18]. It also allows to appreciate the degree of visceral suffering.

The treatment of invagination is always surgical, and leaves no room for reduction by hyperpressure under radiological control, given the frequency of the underlying organic causes. More or less extensive resection, taking the cause, may be necessary [19]. It is reasonable not to make any attempts at disinvagination and to immediately consider block resection of the affected small bowel, if the presence of an underlying malignant tumor is suspected. In this case, resection should be to be wide, on the subject of cancer. In the late stage of irreversible necrosis, it is better to perform block resection without first intestinal disinvagination.

the first reduction is justified in the case where the diagnosis of a benign etiology is made early, at a stage without ischemia or intestinal necrosis. or the presence of a long invaginated intestinal segment, it seems lawful to attempt a preliminary reduction in order to limit the extent of the excision. To avoid short bowel syndrome [20].

Laparoscopy is a real means of diagnosis and sometimes treatment of intestinal intussusception [21]. In case of intestinal obstruction it requires expertise in laparoscopic surgery because of the distention of small loops hindering the vision and making their mobilization difficult with a high risk of iatrogenic wounds.

Conclusion:-

Intussusception is rare in adults. It can occur on any segment of the digestive tract. and it is often secondary to an organic lesion: tumor or inflammatory. The scanner is the ideal test for diagnosis and for researching the cause. The treatment is always surgical in the adult since one often finds an organic lesion.

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