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Ileo-Ileal Invagination Secondary to a Fibrom: About 01 Cases

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Abstract **Case Report**

***Introduction*:** Acute intestinal intussusception secondary to an isolated local lesion (Meckel's diverticulum, a benign or malignant tumor, etc.), forming part of a more general pathology of the digestive tract (rheumatoid purpura, cystic fibrosis, etc.) or occurring in a particular context (Acute postoperative intestinal intussusception, chemotherapy, etc.). ***Observation*:** 15-year-old child, male, without known ATCD, admitted for occlusive syndrome which had been evolving for 5 days before his admission marked by diffuse abdominal pain associated with early postprandial vomiting of food type then bilious, with cessation of matter and gas. On clinical examination, he presented an altered general condition, afebrile at 37°5, the abdomen was slightly distended, tympanic, tender, without palpable mass. The rectal bulb was empty on rectal examination, with no signs of rectal bleeding. The ionogram was disturbed with hypokalemia and hyponatremia with white blood cells at 15,000. CT revealed a rounded image with small bowel distention, digestive thickening and moderate effusion. The child benefited from resuscitation measures to correct hydro-electrolyte disorders before the operating room. Exploration found ileo-ileal intussusception, with necrosis of the ileal loops 15 cm from the Bauhin valve, with the presence of a hyperemic nodular mass. A resection of the necrotic ileal loops removing the hyperaemic nodular mass, with creation of an end-to-end small intestine anastomosis. The piece was sent to the laboratory for a histopathological study, which came back in favor of a benign mesenchymal tumor whose histological and immunohistochemical appearance was compatible with a fibroma. After 01 year, the evolution was favorable. ***Conclusion*:** Ileo-ileal intussusception secondary to a fibroma is rare. Nonspecific symptoms make diagnosis difficult. Treatment is based on surgery.

Keywords: Ileo-Ileal Intussusception, Fibroma, Surgery, Child.

INTRODUCTION

Acute intestinal intussusception secondary to an isolated local lesion (Meckel's diverticulum, a benign or malignant tumor, etc.), forming part of a more general pathology of the digestive tract (rheumatoid purpura, cystic fibrosis, etc.) or occurring in a context particular (postoperative acute intestinal intussusception, chemotherapy, etc.). It is very rare in children with a percentage of 5% [1]. We report 01 case of ileo-ileal intussusception secondary to a fibroma.

OBSERVATION

15-year-old child, male, without known ATCD, admitted for occlusive syndrome which had been evolving for 5 days before his admission marked by diffuse abdominal pain associated with early postprandial vomiting of food type then bilious, with cessation of matter and gas. All evolving in a context of apyrexia and a deterioration in general condition.

On clinical examination, he presented an altered general condition, the conjunctivas were colored, hemodynamically and respiratory stable, Afebrile 37°5, Weight 38kgs. The abdomen was slightly distended, tympanic, tender, without palpable mass. The rectal bulb was empty on rectal examination, with no signs of rectal bleeding. The hernia orifices were free.

The biological assessment: Hemoglobin 16.5 g/dl, Platelet 285,000 mm3, White blood cells 15,000, Urea 0.26 g/l, Creatinine 07 mg/l, CRP 11 mg/l, ionogram was disturbed with hyponatremia and hypokalemia.

An X-ray of the abdomen without preparation standing from the front taking the two diagragmatic domes showed hydro-aerial levels of the hail type, with a lack of ventilation of the pelvis (Fig1). An abdominal ultrasound revealed colonic distension with digestive thickening and moderate effusion. An abdominal CT

showed a rounded image with small bowel distension, digestive thickening and moderate effusion (Fig2).

The child benefited from resuscitation measures to correct hydro-electrolyte disorders. Given the improvement in his general condition, a surgical intervention was decided. Exploration found ileo-ileal intussusception (Fig3), with necrosis of the ileal loops 15 cm from the Bauhin valve, with the presence of a nodular hyperemic mass (Fig4). A resection of the necrotic ileal loops removing the hyperaemic nodular mass, with creation of an end-to-end small intestine anastomosis. The part was sent to the laboratory for a histopathological study, which came back in favor of a benign mesenchymal tumor whose histological and immunohistochemical appearance was compatible with a fibroma (Fig5). After 01 year, the evolution was favorable.

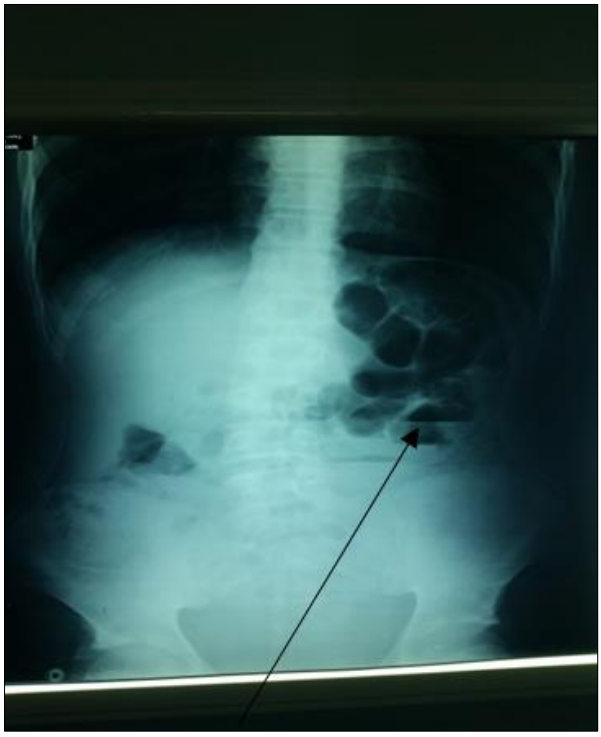

Fig. 1: ASP: Grelic type hydro-aerial level

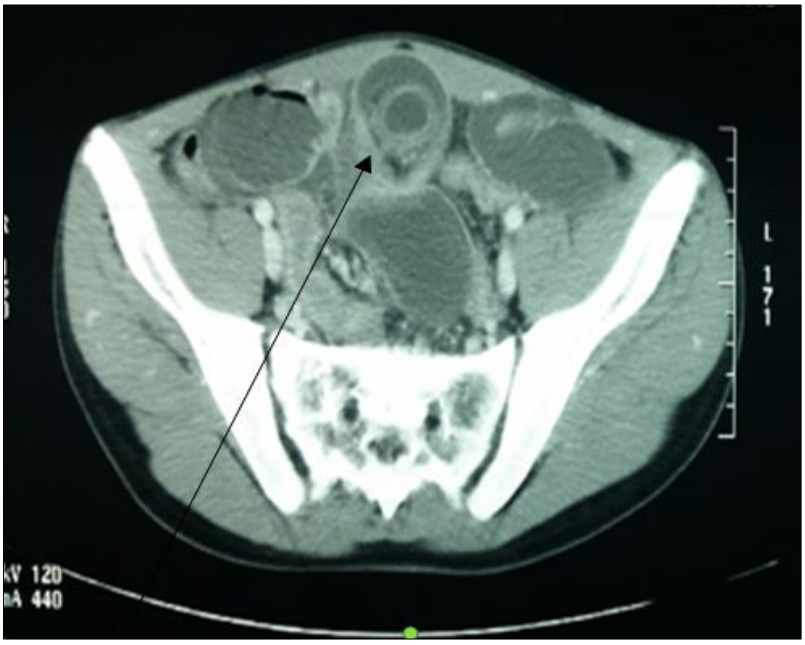

Fig. 2: CT: Roundel image and digestive thickening

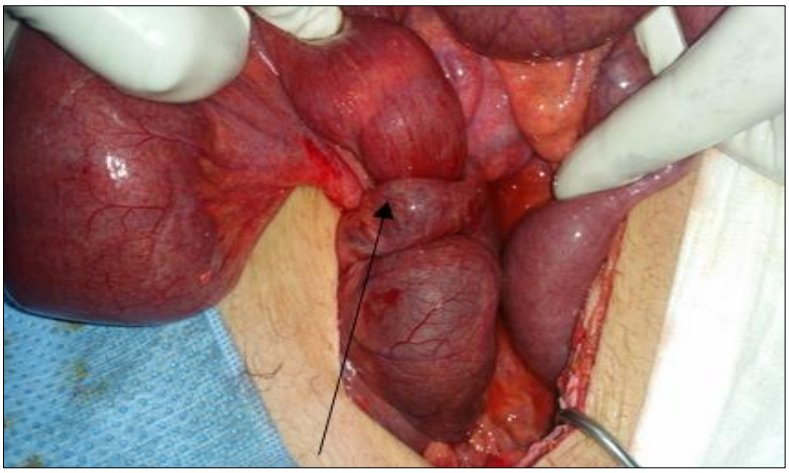

Fig. 3: Intraoperative image of ileo-ileal intussusception

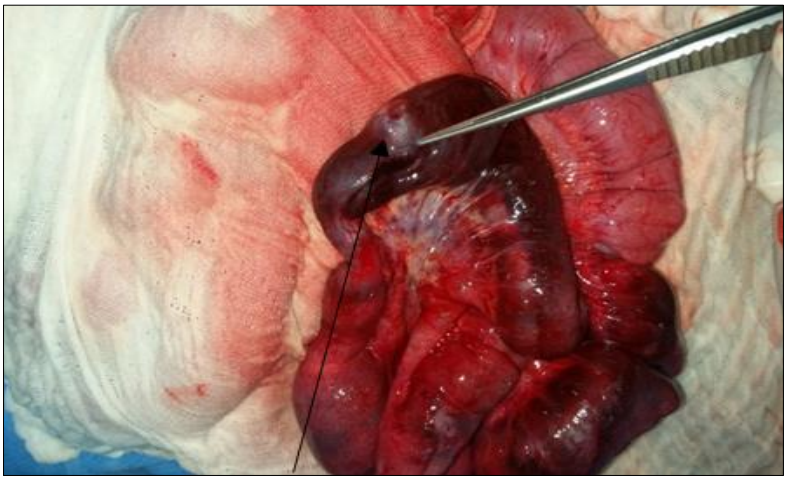

Fig. 4: Intraoperative image of necrotic ileal loops with a hyperemic nodular mass

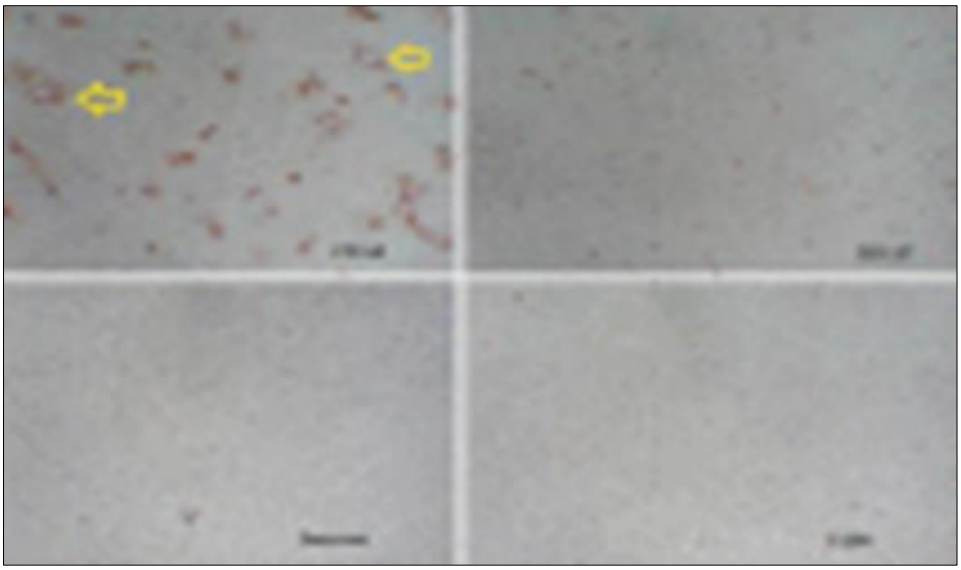

Fig. 5: Negative immunostaining for CD34 (the vessel wall that stains positive as indicated by the arrows), CD117, desmin, and S100

DISCUSSION

Fibroids represent 5 to 10% of rare benign mesenchymal tumors. Ileal site, they tend to invaginate or externalize. They have the same image as leiomyoma but appear less vascularized [2]. Their implantation is mainly ileal.

Mesenchymal tumors offer all histological varieties. The lipoma is usually single. The leiomyoma can present hemorrhagic necrosis, cavitation or even rupture when it is large [2]. Neurogenic tumors, neuromas, schwannomas [3], and neurofibromas represent approximately 10% of benign tumors of the small intestine. They have the same radiological signs as leiomyomas.

They vary in size, sometimes large, so they can be detected by a palpable mass. Coming from the smooth muscle layer of the intestinal wall, their development is often exoluminal. The diagnosis is then easier with ultrasound and especially with CT, whereas it is difficult with barium transit. They have a regular outline and are generally homogeneous. But they tend to ulcerate and necrotize as they increase in size [4, 5].

On ultrasound [6], the leiomyoma is homogeneous, hypoechoic, very regular. On CT scan [4], the lesions are homogeneous but very vascularized and enhance uniformly after injection of contrast product. They may contain calcifications. When they are large and heterogeneous, the differential diagnosis with leiomyosarcoma becomes difficult. Only the existence of locoregional tumor infiltration makes it possible to confirm the malignancy of the lesion on imaging.

Small bowel transit [7, 8], visualizes endoluminal lesions which appear as regular nodules. On the other hand, it is less effective in the diagnosis of exoluminal formations. We will carefully look for a marginal notch or the repression without alteration of peristalsis, of a small loop. When the lesion is necrotic, it may appear as an irregular barium pool. Angiography [9], occurs especially in cases of hemorrhage and shows a hypervascularized mass syndrome.

Surgery is the mainstay of treatment in most cases and is usually done. There is no clear consensus on the optimal strategy for reduction before surgery [10]. Our patient benefited from a manual reduction of the ileo-ileal intussusception with necrosis before performing an anastomosis resection.

CONCLUSION

Ileo-ileal intussusception secondary to a fibroma is rare. Nonspecific symptoms make diagnosis difficult. Treatment is based on surgery.

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