

Intussusception in Adults with Small Intestine Leiomyoma: Case Report and Literature Review

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Abstract

Case Report

Leiomyomas are benign tumors that develop in the small bowel, either in the inside or outside of the lumen or the bowel wall. They tend to occur at an age range around fifty years old, although they could occur at all ages, independent of gender. The diagnosis is often late due to the vague clinical manifestations which include: digestive hemorrhage, intestinal occlusion or abdominal mass. The diagnosis is confirmed by an immunohistochemical analysis of the tissue and the positive CD117 markers. The treatment is the surgical excision of the tumor. This study evolves around the case of a 25-year-old patient presenting with an ileum leiomyoma, including the clinical description, diagnosis, treatment and anatomopathology description. What motivated this work is the rarity of leiomyomas cases and the difficulty of diagnosis.

Keywords: Intestinal Intussusception - Adult – Leiomyoma.

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INTRODUCTION

The acute intussusception is a rare disease in adults [1, 2], difficult to diagnose leading to delayed treatment. An organic etiology is often the cause. The treatment is always surgical [3]. We report a rare case of ileocecal and colic intussusception, the diagnosis was suggested by ultrasound and abdominopelvic CT scan.

OBSERVATION

A 22-year-old patient was admitted in our facility and presented with diffused abdominal pain, intensified in the hypogastric region, associated with early vomiting, bowel obstruction of both fecal matter and gas. The patient was afebrile with a good general condition. The clinical examination found a slightly distended abdomen, a tusk in the hypogastrium. On the digital examination, the rectal bulb was empty. The biological assessment was unremarkable. The abdominal ultrasound showed an aspect of intussusception, producing a target image in the axial section and sandwiched in the transverse section with a mass measuring 4.3x3.5cm, not vascularized by colorized Doppler. The ovaries were normal. Computed tomography showed a hydro-aeric distention of the ileal loops measuring 30mm in maximum diameter, bringing an endoluminal mass to the pelvic level, measuring 66x36x40 mm, which was evenly enhanced after

injection of the PDC. A median sub umbilical laparotomy was performed, harvesting a small parietal mass of about 4x5cm partially stenosing localized 50cm from the ileocecal junction. The rest of the hial was unremarkable. The resection of the mass was performed followed by an end-to-end ileo-ileal anastomosis. Pathological examination of the operative specimen showed leiomyoma of the ileum. Immunohistochemical analysis did not find any malignancy (CD117 negative, CD34 negative). The postoperative outcome was without complications, and the patient was discharged on the tenth postoperative day.

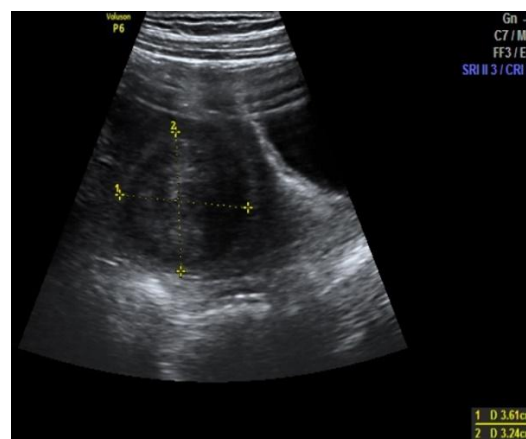


Fig-1 (a)

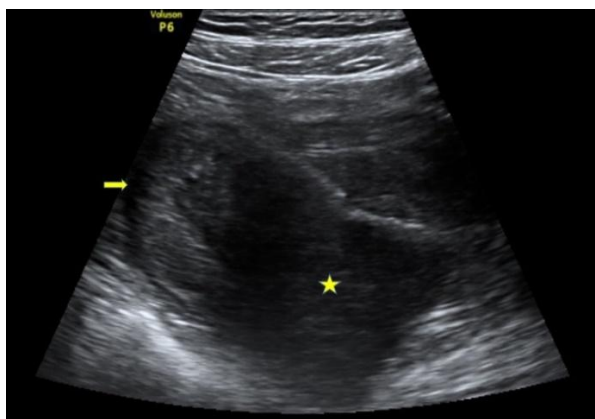


Fig-1(b)

Fig-1 (a, b): Abdominal ultrasound: ileo-ileal intussusception with a "target" sign in transversal section (a) and intraluminal echogenic mass in longitudinal section (b)



Fig-2a

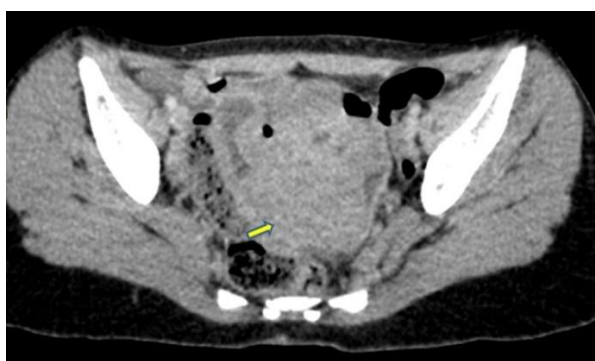


Fig-2b

Fig-2 (a, b): Contrast-enhanced abdominal CT-scan, portal venous phase: axial (a) and sagittal (b) cut: show a ileo-ileal intussusception (a) with a hypodense endoluminal mass (b) which was enhanced discretely after intravenous injection of contrast

DISCUSSION

The small intestine makes up 80% of the length and 90% of the mucous surface of the digestive tract [4]. Only 1 to 2% of tumors develop there. The majority of these tumors are discovered by chance during the operation or during autopsy. The age of the patients is around the fifth decade with no gender predominance. In this case, it was a 22-year-old female but it can occur at any age. The way in which this tumor is revealed varies, sometimes creating a surgical abdomen picture straight away. Gastrointestinal bleeding and abdominal pain are the most common symptoms in over 40% of cases. Bowel obstruction may be the mode of disclosure [5]. The contribution of medical imaging is essential, particularly the CT scan, with the current development of helical acquisitions and coronal and sagittal reconstructions.

The transit of hail is only useful in the endoluminal forms showing a lacunar, regular, rounded or oval image with a neighboring flexible wall. In the exoluminal form, there is an increase in the interloop space. The selective arteriography of the mesenteric vessels will show a hypervascularized tumor, it is relief in large masses. These two radiological examinations can currently be replaced by ultrasound and CT studies. Indeed, ultrasound visualizes a mass of tissue echogenicity most often homogeneous, polylobed centered by the digestive lumen, the appearance found in our patient. Computed tomography is efficient for the demonstration of the leiomyoma [6], its homogeneous tissue character or site of a hemorrhagic rearrangement, the intense contrast enhancement testifying to its hypervascularization, the displacement of the mesenteric vessels in the event of a bulky mass and the increase in the interanses space. It makes it possible to rule out the existence of lymphadenopathy in the context of malignancy or lymphoma, because it is difficult to make the diagnosis of benignity or malignancy on the sole criterion of size. Radical treatment is excisional surgery through healthy tissue [7]. The evolutionary follow-up is radioclinical, quarterly then semi-annual for the first two years.

CONCLUSION

Leiomyomas with endoluminal development are the responsibility of the transit of the small intestine and currently of the scanner with helical acquisition. On the other hand, in its exoluminal forms, ultrasound and tomodensitometry are more effective. As the size criteria is not a certainty of benignity or malignancy, histology and evolutionary monitoring are the only guarantees of the non-aggressive nature of the tumor

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