

Giant ileal inflammatory fibroid polyp: a rare cause of intestinal intussusception

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ABSTRACT: Ileal inflammatory fibroid polyp is a rare non-neoplastic lesion of the gastrointestinal tract. Intussusception caused by an inflammatory fibroid polyps is uncommon. The authors report a case of a 75 year-old female patient presenting with ileal obstruction due to intussusception of a polypoid lesion. The patient underwent surgical treatment and histopathology confirmed the diagnosis.

Keywords: intestinal polyps; ileum; intussusception.

RESUMO: Os pólipos fibroides inflamatórios são raras lesões não neoplásicas do trato gastrointestinal e a intussuscepção devido a essa entidade é incomum. Os autores relatam um caso de paciente do sexo feminino, 75 anos, que apresentou obstrução ileal devido a uma intussuscepção por lesão polipoide. A paciente foi submetida a tratamento cirúrgico, sendo diagnosticado pólipos fibroide inflamatório do íleo.

Palavras-chave: pólipos intestinais; íleo; intussuscepção.

INTRODUCTION

Intussusception is uncommon among adult patients, which accounts for only 1 to 5% of the bowel obstruction cases^{1,2}. Usually, these small bowel intussusceptions are caused by benign neoplasms, and lipoma is the most common one¹. The inflammatory fibroid polyp (IFP), which is a reaction condition, is a rare cause of ileal intussusception¹. The authors report a case of ileo-ileal intussusception caused by IFP in an elderly patient.

CASE REPORT

A 75-year-old female patient searched medical care complaining of vomiting, severe cramp-like pain, associated with abdominal distension. She reported the onset of symptoms four days before. At physical examination, the abdomen was firm to deep palpation, and hydroaerial sounds were increased. Laboratorial tests did not present significant changes. Afterwards, a simple abdominal x-ray showed distension and bowel loop edema. Since this picture is consistent with acute

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obstructive abdomen, the choice was to perform an exploratory laparotomy. During surgery, loop intussusception was identified, approximately 15 cm proximal to the ileocecal valve. The manipulation of these bowel loops showed an intraluminal mass as the possible cause. Based on these findings, the choice was to perform a partial enterectomy. This material was histopathologically analyzed.

Macroscopically, the ileal segment presented a large pedunculated polyp, measuring 3.5 cm in its longest axis (Figure 1). The microscopic examination showed a polyp located mainly in the submucosa. The lesional stroma presented fibroblast proliferation, with exuberant vascularization and a large number of inflammatory cells, including eosinophils (Figure 2). Morphological findings allowed the diagnosis of ileal inflammatory fibroid polyp.

DISCUSSION

The IFP was first described by Vanek, in 1949, as a “gastric submucosal granuloma with eosinophilic infiltration”¹⁻¹¹. It is a rare type of mesenchymal gastrointestinal tract lesion that occurs as localized polyps mainly in the gastric antrum, and not so often in the small intestine, colon and esophagus, in decreasing order³.



Figure 1. Ileal segment showing a polyp with 3.5 cm in its longest axis.

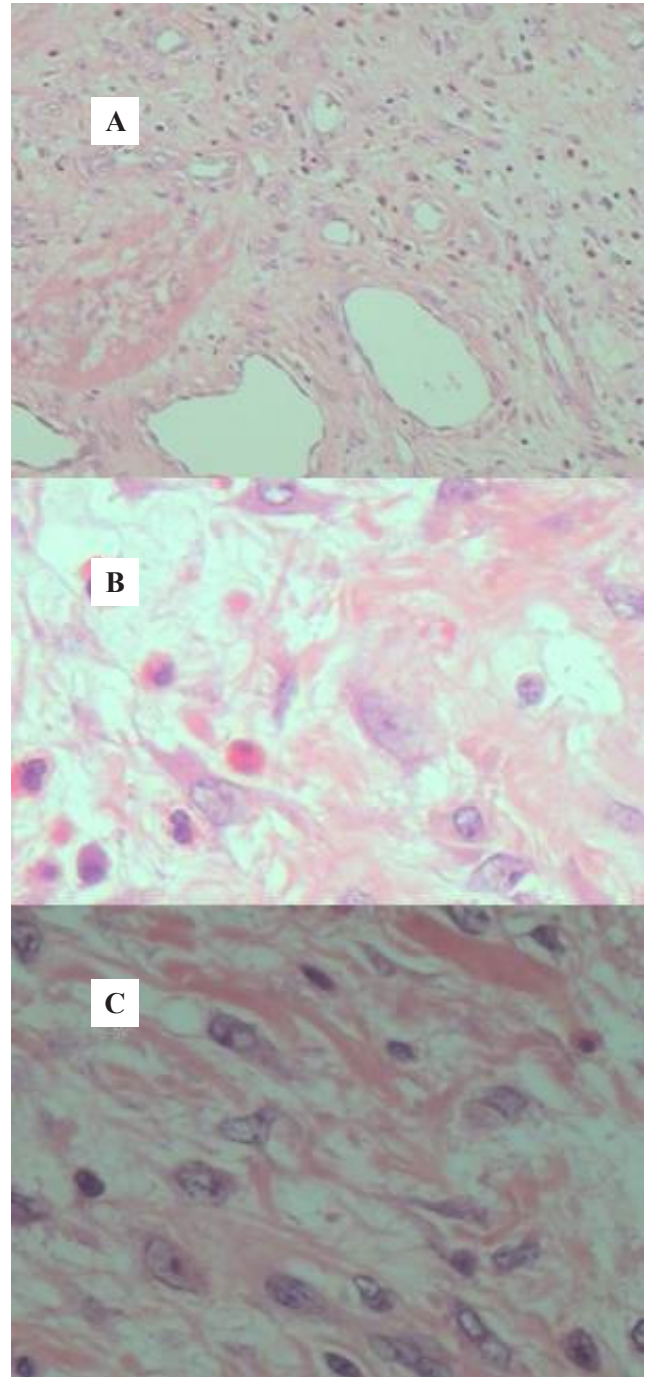


Figure 2. Microscopic examination shows exuberant vascularization (A) (hematoxylin and eosin – HE 100X), large number of eosinophils and fibroblast cells (B) (HE 400X). The presence of collagen areas is a common finding (C) (HE 400X).

The IFP etiology remains unknown. Some authors believe that it is caused by an exaggerated allergic reaction, due to a persistent inflammatory stimulus. This can be a result of trauma, bacterial infections or chemical injury^{5,7}. Immunohistochemical studies have refused the neural or vascular nature of this lesion because the S100 and the VIII factor are negative^{8,9}. Nowadays, the most accepted hypothesis is that it originates in dendritic cells, due to its immunohistochemical profile, which shows CD34, fascin and cyclin D1 as positive. The absence of c-Kit expression proves that the IFP are not related to the gastrointestinal stromal tumors¹⁰. Epigastralgia, vomiting and bleeding are commonly observed when the lesions are located in the stomach. Cramp-like pain, weight loss, bleeding and diarrhea are seen in colonic lesions, while the intussusception and obstruction are symptoms of lesions located in the small intestine⁴. Such situation occurs due to the presence of intraluminal mass, which can cause a difference in motility between both intestinal segments, thus enabling the bowel loop intussusception¹.

Macroscopically, these polyps can range from 1 to 5 cm, even though sizes larger than 20 cm have

been described¹. They can be sessile or pedunculated, appearing to be nonencapsulated and with mucosa ulceration. Microscopically, the lesion is possibly originated in the submucosa. It is comprised of edematous or fibrous stroma, containing many blood vessels of different calibers⁴. The fibroblast proliferation of the reaction type presents fusiform and stellate cells intercalated by collagenous matrix⁶. The balance of these collagen fibers and the proportion of fibroblast cells can be related to the evolution state of the lesion. That is, significant amounts of collagen and few cells can mean that lesions are old. However, those with many cells and little collagen represent newer lesions⁹. The inflammatory infiltrate is diffuse and includes plasmacytes, lymphocytes, macrophages and eosinophils. Cellular atypia and mitotic activity are not observed⁴.

The preoperative diagnosis of intussusception is rare, but it can be suggested by a palpable mass in the abdomen or with imaging tests. However, most cases can only be diagnosed with surgery⁶.

Therefore, IFP is a rare cause of bowel intussusception, which is usually diagnosed intraoperatively, and the resection of the involved bowel loop is the treatment of choice.

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