

Acute Obstructive Abdomen Secondary to Intestinal Lipoma Intussusception

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Abstract

Introduction: Intestinal intussusception corresponds to invagination of one segment inside another. Although rare in adults, it corresponds to 1% of cases involving intestinal obstruction, being more common in the small intestine. The objective of this study is to report a case of intestinal intussusception secondary to lipoma. **Case Report:** female patient 51 years was admitted to the emergency room with a colicky abdominal pain for 1 month, no irradiation, and with worsening for 2 days, associated with nausea, vomiting and hematochezia. On physical examination, distended and hypertympanic abdomen with pain to palpation and rectal touch with melena was observed. Acute abdominal X-ray demonstrated evidence of colonic loop dilation and hydro-air level. Computed tomography examination of abdomen and pelvis demonstrated a target lesion suggesting intussusception, confirmed in the intraoperative by invagination from the terminal ileum to the proximal descending colon with subtotal colectomy and terminal ileostomy. **Discussion:** Intussusception in adults usually occurs secondary to a point of advance, either by benign tumors, malignant or motility disorders. In the large intestine, lipoma is considered a rare cause of invagination, and malignant tumors are more common, and its symptomatology and risks of complications are mainly related to the size of the lesion. **Conclusion:** The colic submucosal intraluminal lipoma is a rare cause of intestinal intussusception and is usually an intraoperative diagnosis.

Key words: intestinal obstruction; colon lipoma; intestinal intussusception; surgical treatment

Introduction

Intestinal intussusception corresponds to invagination of one segment inside another, and 95% of the cases affects children. Although it is rare in adults, it corresponds to 1% of intestinal obstructions, being more common in the small intestine than in the large [1, 2].

In 90% of the cases, the etiology is identified by imaging studies, and the most common cause of invagination of the small intestine is benign lesions, especially lipoma, leiomyoma, hemangioma, Meckel's diverticulum, among others. In the large intestine, the most common cause is malignant neoplasms, which corresponds to 65% of cases [1, 3].

The exact trigger mechanism is still unknown, but injuries or irritations in the intestinal wall are believed to alter peristalsis, precipitating the process of invagination [1, 4, 5, 6].

The objective of this study is to present a case of intestinal intussusception secondary to lipoma in a female patient with acute obstructive abdomen.

Case Report

MBS, 51-year-old female, admitted to the surgical emergency room with a history of diffuse colicky abdominal pain for a month and no irradiation,

with worsening for 2 days, associated with nausea, bilious vomiting after eating and hematochezia in small amounts. In physical examination, she was in a regular general state, dehydrated 1+/4+, with vital signs within the parameters of normality, flaccid abdomen, slightly distended, with increased hydro-aerial noises, hypertympanic and painful to the mesogastric palpation without signs of peritoneal irritation, besides rectal touch with melena.

Complementary tests showed Hb 13.1 g/dl, Ht 39.8%, Leukocytes 11,500/mm³ (75.5% segmented), 418,300/mm³ platelets, urea 82 mg/dL, creatinine 1.24 mg/dL, Protein C Reactive 157.3 mg/L, ions within the normal range. Imaging of the abdomen revealed an obstructive pattern with dilation of loop of the large intestine and hydroair level. Computed Tomography of the abdomen and the pelvis showed a lesion in target that suggested transverse colon intussusception (Figure 1 and 2) confirmed in the intraoperative by invagination from the terminal ileum to the proximal descending colon. A subtotal colectomy and terminal ileostomy were performed (Figure 3). Patient was discharged in the 5th postoperative period.

Anatomopathological study evidenced tumoration in the large intestine measuring 7.0x6.5cm located in cecum next to the ileocecal valve compatible with submucosal lipoma.



Figura 1. TC coronal section of ileo-colic intussusception.



Figura 2. TC axial section of intussusception ileo-colic



Figura 3. Intussusception photo with visualization of lipomatous lesion

Discussion

Intussusception can occur in the absence of a point of advancement, more common in children and in the small intestine, being considered primary. In adults, it occurs more rarely, usually with the presence of a

advancement point and presents as inflammatory disease, benign or malignant tumors, and motility disorders as causes [7, 8].

The exact mechanism of action that precipitates intussusception is uncertain, but it is believed that an injury or irritation in the intestinal wall may alter the normal peristalsis and result in an invagination process [1, 9]. There are four main types, which are differentiated by location:

1. involving slender handles;
2. colon handles only;
3. ileocolic, involving terminal ileum and ascending colon and;
4. ileocecal, involving the ileocecal valve and ceco[10,11,12].

Most colon invaginations result from malignant lesions, especially adenocarcinoma and lymphoma [14], corresponding to 65% of cases. When it comes to benign tumors, lipoma appears as a rare cause, with an incidence of 0.2 to 4.4% throughout the world. Despite this, it is the third most common benign tumor in the large intestine, being less prevalent only than hyperplastic polyps and adenomatous [15].

Colon lipomas are more frequent in women, with a higher incidence between 5° and 6° decades of life [1, 4, 5, 6, 16, 17]. The most common sites are cecum and ascending colon, with a prevalence rate of 61% of cases [1, 4, 5, 6, 14]. Similarly, the case presented here, regarding age and location, are typically asymptomatic, and are commonly found incidentally during a colonoscopy, intraoperative or autopsies [15]. The symptomatology is related to the complications and size of the lipoma and occurs in about 25% of cases [3]. Those with more than 2 cm may cause intestinal obstruction without intussusception, and those above 4 cm, similar to that reported, are considered giant and more commonly related to intussusception [3, 5, 6, 18]

Computed tomography is considered the gold standard for the diagnosis of intussusception, and spherical or ovoid mass with internal lesions of thin septa with homogeneous content [2].

In most cases, involving adults, the treatment is eminently surgical, due to the possibility in up to 65% of cases of association with malignant lesions [1]. There are controversies regarding the preliminary options for reduction of intussusception before resection [13,16] but the reduction should not be attempted if there are signs of ischemia or intestinal perforation, besides having its indication related to the location of intussusception [1,2,5]

Our case presents an uncommon manifestation for an ileo-colic intussusception, in which the patient presented an intramuscular lipoma causing small bowel invagination that extended to the descending colon, demonstrating the relevance of the surgical treatment.

Conclusion

Colic submucosal intraluminal lipoma is a rare cause of intestinal intussusception and is generally diagnosed intraoperatively, as in the case reported.

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