Colocolonic intussusception secondary to juvenile polyp, case report

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Abstract

Colocolonic intussusception is a rare event because the descending colon lies fixed in the retroperitoneal position. We present a case of colocolonic intussusception in a 17-year-old boy due to multiple juvenile polyps. The patient was treated by left hemicolectomy. (Acta gastroenterol. belg., **2013**, 76, **255-256**).

Key words : colocolonic, intussusceptions, juvenile polyp, pediatric, surgery, hamartoma.

Introduction

Intussusception, especially the ileocolic type is a common cause of bowel obstruction in children with painless rectal bleeding (1-3). Colocolonic intussusception is a rare event seen in 3% of cases (3,4,5). The descending colon lies fixed in the retroperitoneal position, therefore, it is an uncommon site for intussusception (6). The most common cause in colocolonic intussusceptions is an adenomatous or juvenile polyp (7-10). A juvenile polyp as an underlying cause was rarely reported in the literature (10). We present a case of a colocolonic intussusception in a 17 year old boy secondary to multiple juvenile polyps.

Case Report

We present a 17 year old boy who presented with fever, abdominal pain and bloody diarrhea for a duration of 3 days. The vital signs were stable. On physical examination, generalized abdominal tenderness was detected. Stool examination confirmed blood with trophozoites of entameobia histolytica. Metronidazol was started but the condition of the patient worsened. Hemoglobin dropped from 10.5 to 8 gram/deciliter and WBc count increased from 4000 /mm^3 to 7400/mm^3. The other lab data were unremarkable. Abdominal sonography was normal. Abdomino-pelvic CT-scan with contrast showed a large obstructed segment of the large bowel with significant wall thickening in favor of intussuception. The patient underwent exploratory laparatomy. The transverse and ascending colon were significantly dilated and grossly inflamed upon direct visualization. A left-sided hemicolectomy was performed without complications, and the patient was discharged from hospital in a good condition. Gross examination revealed a gangrenous bowel segment that was invaginated into the adjacent parts of the colon. On opening, there were three polypoid masses measuring 5 × 4 × 3 cm at the site of intussuception (Fig. 1A & 1B). Microscopic examination revealed ischemic changes in the colonic mucosa as well as cystic spaces lined by mucous secreting cells, in favor of juvenile polyp (Fig. 2A & 2B).

Discussion

Intussusception is invagination of a segment of the proximal bowel into the distal segment, which lead s to obstruction, strangulation, necrosis and perforation. This is thought to occur because of an intraluminal mass, lymphoid hyperplasia, intestinal foreign body, diverticulum or surgical anastmosis (8,9). Intussusception is idiopathic in 95% of patients and Meckel's diverticulum, small bowel polyps or intestinal duplications are found in 5% of cases (2,3). The clinical presentations are variable, usually consisting of colicky abdominal pain, so clinical examination is often unreliable. Plain film radiography is neither sensitive nor specific. CT scan can detect a potential etiology such as intra-abdominal malignancy (1,2).

The patients usually need surgical operation with segmental bowel resection (4). Unlike the pediatric population, where the etiology is often idiopathic, a discrete lesion is ultimately identified in 90% of adult cases. Lipoma, a common benign tumor of the colon, was reported as an etiology of intussusception especially in adults (2).

Juvenile polyps are hamartomatous polyps which often appear before twenty years of age, but they can also be seen in adults. They usually become symptomatic, with hematochezia. The most common location (66%) is the rectosigmoid colon and they usually present with rectal bleeding. Juvenile polyposis syndrome is characterized by the presence of more than five polyps in the colon or rectum, or numerous juvenile polyps throughout the gastrointestinal tract (7-10). They are benign inflammatory lesions with no malignance potential. Histopathology showed cystic spaces lined by mucous secreting cells (9,10).

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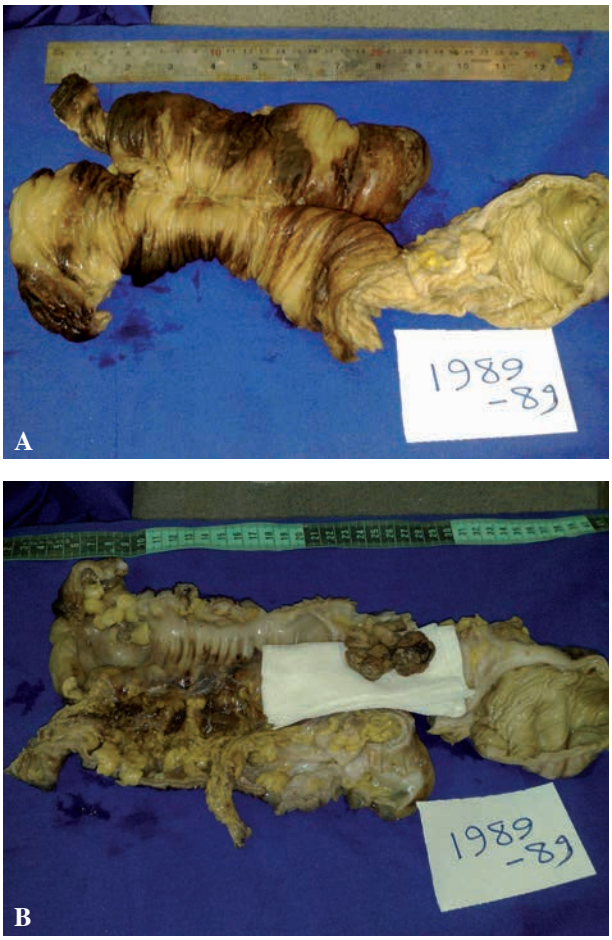

Fig. 1A & 1B. — Surgical specimen : The polypoid mass with gangrenous descending colon.

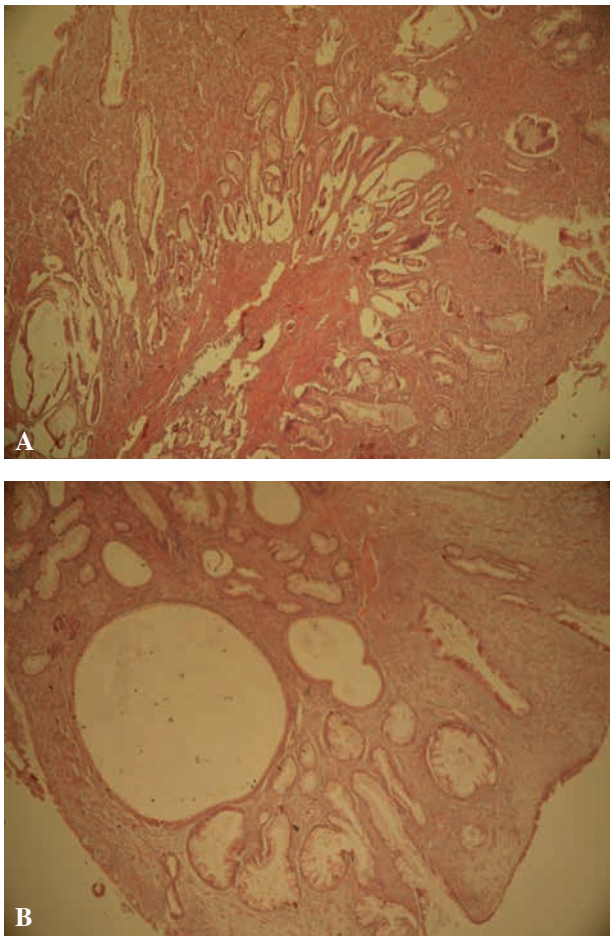

Fig. 2A & 2B. — Multiple dilated mucous glands with stromal inflammation and surface ulceration (H&E ×200).

Conclusion

The combination of clinical findings and diagnostic techniques can help in the diagnosis of colonic intussusception. Radiologic reduction is a useful initial step but surgical resection is the definitive treatment. A juvenile polyp as an underlying cause is a rare event.

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