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Case Report

Colonic Intussusception Revealing a Cecal Adenocarcinoma Associated with Silent Crohn's Disease

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ABSTRACT

Bowel intussusception is uncommon during adulthood and represents 1% to 5% of all bowel obstruction mainly involving the small bowel. Although most of small bowel intussusception during childhood remains idiopathic, malignant or benign tumors and post-operative complications are usually the underlined diagnosed beyond the intussusception for adults. Few cases reported bowel intussusception during Crohn's disease without evidence of any association between the two conditions. We report the case of a colonic intussusception of a young adult secondary to a colorectal cancer revealing a silent Crohn's disease.

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Case Description

Colonic intussusception during adulthood is uncommon, particularly in patients with Crohn's disease. A 39-year-old man without significant medical or surgical history but with a second-degree family history of colorectal cancer and Crohn's disease presented at the emergency ward for subacute lumbar and right lower quadrant pain. The patient's abdominal pain was associated with several events of postprandial vomiting, changes in his bowel habits within the 2 previous days and loss of 12% of his body weight over the last 6 months. On physical examination, there was no hyperthermia, right iliac or lumbar tenderness, or guarding. Blood tests showed leukocytosis, with a leukocyte count of 11 Giga/L, and increased CRP and albumin levels of 170 mg/L and 32 g/L, respectively.

A contrast-enhanced CT scan of the abdomen and pelvis (Figure 1) confirmed the presence of an intestinal obstruction with an ileocolic intussusception associated with a mass-like lesion of the cecum and extensive ileocolitis ranging from the sigmoid colon to the small

intestine. Interestingly, right unilateral sacroiliitis was noted concomitantly.

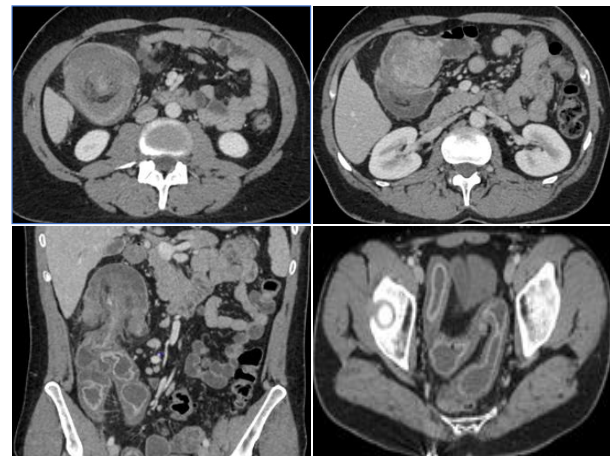


Figure 1: Contrast-enhanced CT scan (axial and sagittal view) of the abdomen and pelvis showing the colonic intussusception associated with a mass-like lesion of the cecum and extensive ileocolitis.

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Surgical observations were consistent with Crohn's ileocolitis features, particularly major fat wrapping involving 40 cm of the terminal ileum and a large ascending colon mass without intussusception. A right hemicolectomy with tumoral lymphadenectomy was performed in association with extensive ileal resection and ileocolostomy.

The pathologist reported severe inflammatory changes in both the ileum and colon segments that were consistent with non-granulomatous Crohn's disease. The colonic mass was confirmed to be an adenocarcinoma (pT1N0M0) that was negative for immunohistochemistry (IHC) or microsatellite instability (MSI) phenotypes, eliminating a Lynch syndrome-associated tumor. Discharge was authorized 10 days after surgery. Closure of the ileocolostomy opening was performed 6 months later, and no postoperative preventive treatment of Crohn's disease was introduced. Another 6 months later, a Rutgeerts i4 postoperative recurrence led to the initiation of anti-TNF treatment.

Discussion

Intussusception is uncommon in adults, with 95% of cases occurring in the pediatric population, and remains a rare cause of intestinal obstruction, accounting for approximately 5% of all intestinal obstructions [1]. Intussusception usually presents with features of chronic intestinal obstruction, such as abdominal pain, intermittent vomiting or nausea and changes in bowel habits, but manifestations may be nonspecific [2-4]. A contrast-enhanced CT abdominal scan is the most reliable and accessible exam to diagnose intussusception [5, 6]. A recent meta-analysis that compiled the results of 40 retrospective studies, including 1229 cases of adult intussusception, showed a majority of intussusceptions were enteric forms (49.5%) followed by ileocolic forms (29.1%), whereas colonic forms (19.9%) were not as common [7]. The exact mechanism of intussusception is still unknown, but it has been described as an internal prolapse of the proximal intestinal segment into the distal segment likely caused by impaired peristalsis that is initiated by pathologic lesions. Colic intussusception is a rare occurrence due to fixation of the mesocolon to the posterior abdominal wall [3]. Considering the high rate of malignant tumors caused by primary colonic adenocarcinomas, surgical resection without reduction is usually advised [7].

Intussusception associated with Crohn's disease is exceedingly uncommon, probably related to the presence of intestinal wall fibrosis. Of the 19 cases reported in the literature, 10 were postoperative intussusceptions; the other cases were related to gastrointestinal stromal tumors, stenosis, and fibrotic adhesion after chronic intestinal dilatation, and 5 were related to giant pseudopolyps [8-19]. Colorectal cancer is a frequent complication of longstanding Crohn's colitis that justifies endoscopic screening [20]. Silent Crohn's disease precludes surveillance, but the outcomes remain similar to other types of Crohn's disease, usually leading to a diagnosis when a complication occurs, as outlined in the present case [21-24].

To conclude, intussusception is a rare condition, particularly in patients with Crohn's disease. Silent Crohn's disease is a challenge for physicians because it may lead to complication-induced discovery of related diseases, in our case, colorectal cancer, often leading to additional surgeries.

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