Adult ileocolic intussusception due to primary diffuse large B-cell lymphoma

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ABSTRACT

Intestinal intussusception is an uncommon condition in adults. Unlike the idiopathic spontaneous occurrence in children, about half of the cases in this population are associated with malignant neoplasms. This report describes a 44-year-old male patient presenting with abdominal pain and signs of intestinal obstruction. Through a CT examination, the patient was diagnosed with ileocecal intussusception. A 3 cm lesion was found in the terminal ileum, and a segmental enterectomy was performed. An immunohistochemical analysis identified a large B-cell lymphoma. Due to the high association with tumors, the finding of intestinal intussusception in adults should be properly investigated, regardless of symptoms.

CASE REPORT
A 44-year-old male patient presented to the emergency department complaining of sudden onset cramping abdominal pain associated with nausea and vomiting. The physical examination revealed abdominal distention, but no signs of peritoneal irritation. A computed tomography (CT) of the abdomen identified the presence of ileocecal intussusception (Fig. 1). Soon after the admission, the patient experienced complete improvement of the symptoms. The abdominal CT scan was repeated after 24 hours, and the intestinal intussusception was no longer visualized. The patient was then discharged, and an outpatient colonoscopy was scheduled. During the following days, the subject remained asymptomatic. Nevertheless, the colonoscopic examination indicated the recurrence of ileocecal intussusception, without any noticeable mucosal changes (Fig. 2). Thereafter, a videolaparoscopy was performed, the invagination was reduced and a 3 cm tumor mass was identified in the terminal ileum wall. The pathologic bowel segment was resected en bloc using oncologic principles. The excised tissue specimen (Fig. 3) was sent to histopathological analysis, which showed an atypical lymphocytic infiltrate suggestive of non-Hodgkin lymphoma. Immunohistochemistry confirmed the diagnosis of diffuse large B-cell peripheral non-Hodgkin lymphoma, of the germinal center B-cell-like (GCB) subtype. The patient was referred to clinical oncology for further management and care.

DISCUSSION

Intestinal intussusception in adults is typically due to pathologic lead point. As opposed to the pediatric population, approximately 90% of the adult cases have an identifiable etiology (2) and approximately 50% of adult cases are accompanied by malignant lesions. (2) The most commonly reported symptoms include abdominal pain and intestinal obstruction. (3) In this report, the patient experienced complete symptoms and tomographic resolution. The high suspicion is essential to ensure correct diagnosis needed and effective treatment of the underlying condition.

REFERENCES


Figure 1

Computed tomography cross-section images showing ileocecal intussusception. A - Axial image section characteristic of intussusception (target sign). B - Detail (target sign). C - Coronal-oblique reconstruction image, showing the mesentery within the ascending colon.

Figure 2
A - Colonoscopy image showing ileocecal intussusception without signs of ileocolonic mucosal alterations or parietal distress.
B - Surgical specimen: Intestinal segment containing a centrally elongated hardened lesion on its outer wall.
C - Surgical specimen: Intraluminal aspect - a well limited, homogenic, mass arriving from the mucosa.

Figure 3

Immunohistochemical test image of the surgical specimen.
A - CD20+ in the membranes and cytoplasm of neoplastic cells.
B - High Ki-67 expression.
C - Diffuse CD10 expression in the neoplasia.