

Ileocolorectal Intussusception due to Caecal Hamartoma

CW Lin, SM Kuo, GY Diau, KC Chen

ABSTRACT

Although 75% of intussusceptions occur within the first two years of life, they can also develop in teenage years. This is a case report of a 13-year old boy with an ileocolorectal intussusception from a large caecal hamartoma (10 x 6 x 2 cm³) adjacent to the ileocaecal valve. Partial resection of the ascending colon and terminal ileum was performed, and the pathology of the resected mass revealed a hamartoma. Ileocolorectal intussusception secondary to hamartoma represents a particularly rare event in the paediatric population. With early surgical intervention, this patient's outcome was uneventful.

Keywords: Colorectal, hamartoma, intussusception

Intususcepción Íleocolorectal Causada por Hamartoma de Ciego

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RESUMEN

Aunque el 75% de las intususcepciones ocurren en los primeros dos años de vida, pueden también desarrollarse en el período de la adolescencia. Éste es el reporte del caso de un niño de 13 años con una intususcepción ileocolorectal a partir de un hamartoma de ciego de gran tamaño (10 x 6 x 2 cm³) adyacente a la válvula ileocecal. Se realizó una resección parcial del colon ascendente y el íleo terminal, y la patología de la masa resecada reveló un hamartoma. La intususcepción ileocolorectal derivada secundariamente a partir de un hamartoma, representa un caso particularmente raro dentro de la población pediátrica. Una intervención quirúrgica temprana, hizo posible que este paciente tuviera una evolución clínica sin graves consecuencias.

Palabras claves: Colorectal, hamartoma, intususcepción

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INTRODUCTION

Intussusception represents the most common non-traumatic cause of an acute abdomen in children (1). Children presenting at older ages are more likely to have a pathologic lead point as the aetiology of their intussusceptions. The initial presenting symptoms often vary, and the classic symptoms, such as abdominal pain, currant jelly stool and palpable mass, occur infrequently (2, 3). We describe a child with intractable abdominal pain as the initial presenting symptom of intussusception due to a caecal hamartoma.

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CASE REPORT

A 13-year old boy with intractable abdominal pain was referred to the paediatric emergency department from a local clinic. The patient had experienced the same symptom on three separate occasions during the preceding month. On those occasions, he was treated with glycerine enemas to relieve significant constipation. His past medical and surgical history were otherwise unremarkable.

The patient denied anorexia, nausea, vomiting or haematochezia. He noted decreased stool frequency and a sensation of incomplete defecation for one week prior to presentation. On examination, he was afebrile, and the abdomen was soft and mildly distended with generalized tenderness over the entire abdomen, but there was no rebound tenderness. A palpable mass was detected in the left lower quadrant (LLQ) of the abdomen.

Laboratory evaluation revealed a leukocytosis of 10 600/ μ L with 82.6% segmented neutrophils. His haemo-

globin was 13.2 g/dL. Other laboratory test results were normal with the exception of an elevated C-reactive protein (3.32 mg/dL). Abdominal sonography of this palpable mass revealed a heterogeneous entity, and abdominal computed tomography (CT) showed a long-segment ileocolorectal intussusception with a 15 x 8 x 3 cm³ fat-containing mass in the rectum (Figs. A, B). The patient underwent an ileocolic

resection, which included the removal of the giant mass located near the ileocaecal valve (Figs. C, D). Histology

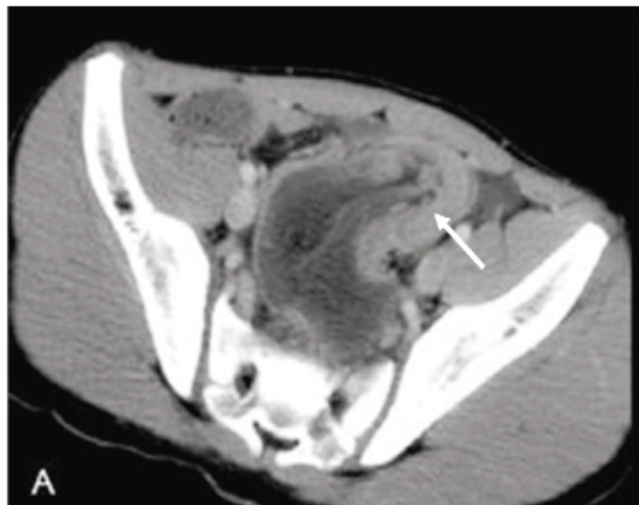


Fig. A: Abdominal CT scan showed fat-containing mass (arrow) over rectum.

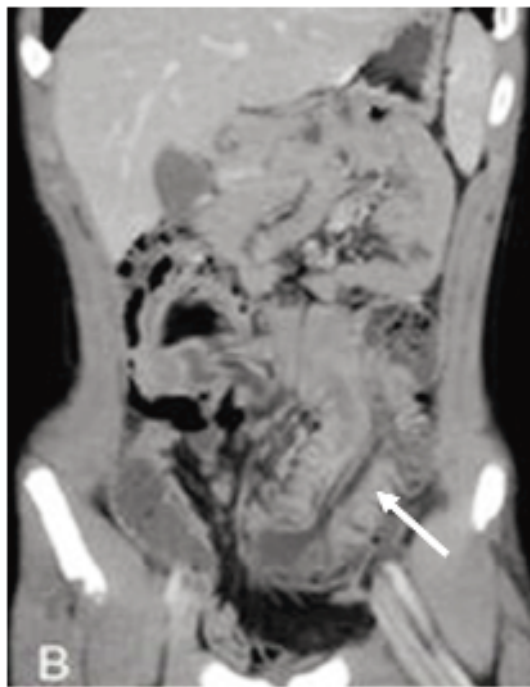


Fig. B: Abdominal CT scan showed a long-segment ileocolorectal intussusception (arrow).

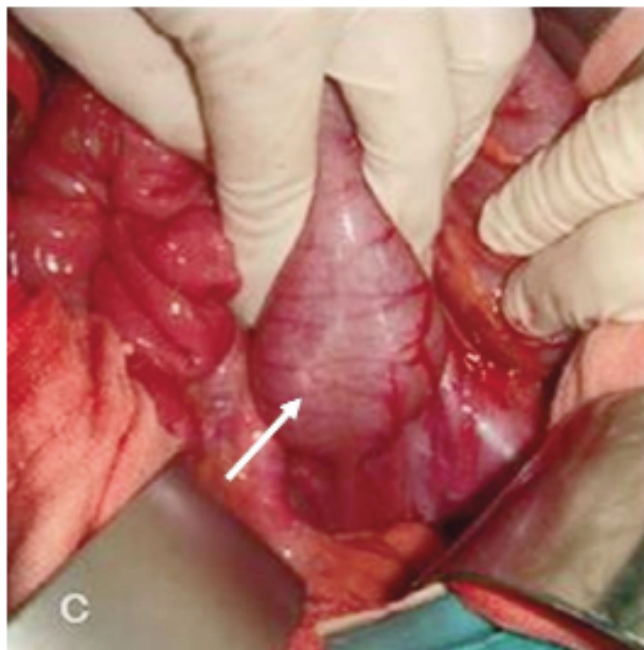


Fig. C: A bulging mass in the rectum (arrow).

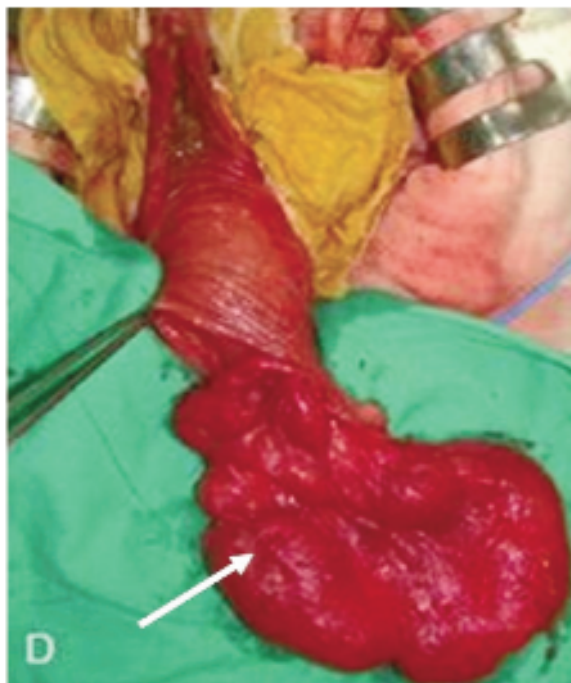


Fig. D: A giant hamartoma over caecum (arrow) near the ileocaecal valve.

showed a benign hamartoma with a significant amount of adipose tissue and blood vessel proliferation. The post-operative recovery was uneventful.

DISCUSSION

Intussusception is a common paediatric disease, ranking second only to appendicitis as the most common cause of paediatric abdominal emergencies (1). Intussusception was first described in 1793 by Hunter *et al* and the first successful operative reduction was performed by Hutchinson *et al* in 1876 (3). Up to 90% of childhood intussusception is idiopathic in origin, and a localized patch of lymphoid hyperplasia over the bowel wall has been suggested as the lead point in the pathogenesis (3, 4). However, a pathologic lead point is more readily identified in older age groups [\approx 12% of cases] (3–5). Lead points in children have included Meckel's diverticulum, polyps, lymphoma, inverted appendiceal stump, intramural haematoma in Henoch-Schönlein purpura, mass lesions in cystic fibrosis and submucosal lipoma (4–6).

The classic presentation of intussusception (*ie*, abdominal pain, red currant jelly stools and palpable mass) occurs in only 7.5% to 40% of intussusception cases (2, 3). Therefore, the diagnosis is delayed in up to 60% of cases, which explains the principal source of morbidity and mortality (4). Careful physical examination and the presence of a palpable mass should warrant consideration of intussusception. Despite the presence of unspecific abdominal pain and a history of chronic constipation, careful physical examination of the patient revealed a palpable mass over the LLQ of the abdomen. The CT scan readily identified the intussusception.

The first nonsurgical treatment for intussusception was a fluoroscopy-guided contrast liquid enema technique in

1927 and it provided an 80% success rate (7, 8). Nevertheless, surgery remains the definitive management strategy for cases of failed reduction, or for those cases in which free air, peritonitis, and/or shock are present.

Intussusception should always be considered in the differential diagnosis of constipation and LLQ abdominal mass. When intussusception is suspected, abdominal sonography and CT scan are effective diagnostic modalities. Surgical resection is required for any identified pathologic lead point (3, 9, 10). Prompt diagnosis and management of intussusception prevents complications and prolonged hospitalization.

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