

Colo-Colic Intussusception Due to Left Colic Tumor: A Rare Cause in Adults

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Abstract

Intussusception in adults is quite rare. The computed tomography scan has proved to be more accurate. The surgical approach is influenced by the prevalence of associated malignancy, the anatomic site, and various local factors. Primary surgical resection without prior reduction is the treatment of choice in colocolic adult intussusception.

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Key words : intussusception ; Colon cancer; Surgery; Hemicolectomy

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Colo-Colic Intussusception Due to Left Colic Tumor: A Rare Cause in Adults

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Introduction:

Whereas intussusception is relatively common in children, it is rare in adults. A definable lead point is common in 70–90% of adult intussusceptions. However, pediatric intussusception is idiopathic in 90% of cases [1–3]. CT scan confirms the diagnosis, and surgery is still the management pillar. We described a case of left colon intussusception in an adult caused by a malignant tumour diagnosed preoperatively by a computed tomography (CT) scan.

Case presentation:

A 49-year-old male with no past medical history, never operated on the abdomen, presented to the Emergency Department with 3-day history of the obstructive syndrome. Physical exam showed a distended, tympanic abdomen. Digital rectal examination did not find palpable mass. A CT scan showed a left colo-colic intussusception with a dilated proximal colon (**Fig 1.a**) . Axial abdominal CT scan view showed a typical target sign of intussuscepted bowel (**Fig 1.b**) . The patient was admitted and underwent emergency laparotomy after a short time of resuscitation. Intraoperatively finding confirmed imagery data. There was an obstruction with distension of the small bowel, caecum, transverse colon ahead of colo-colic intussusception. A hard mass was palpated within the intussuscepted bowel. There were neither hepatic metastases nor peritoneal nodes. The manual reduction was not attempted, and we performed a left oncological colectomy (**Fig 2**) with a double-barrel colostomy. The postoperative course was uneventful, and the patient was discharged after six days. Histopathological examination revealed a well-differentiated adenocarcinoma with mucinous component 20%; there were free surgical margins. Fifteen lymph nodes were found. The final pathology

staging was T3N0M0. Immunohistochemically staining showed a stable microsatellite profile. Then the patient was referred to the oncology department for six cycles of FOLFOX spread over six months. Ten months after surgery, he had a negative colonoscopy and repeated abdominal CT scan without local recurrence of metastases. So Restoration of Bowel Continuity was performed.

Discussion:

Intussusception is defined as the telescoping of the proximal loop of the intestine into the distal loop resulting in obliteration of the lumen. Intussusception in the small bowel seems to be most common than intussusception in the large bowel. Whereas intussusception is relatively common in children, it is clinically rare in adults [2]. Approximately 50% of the colonic intussusception in adults are due to malignant tumours [3,4,5]. Apart from malignant etiologies, there are other causes of colonic intussusception, such as submucosal lipomas, adenomatous polyps and leiomyomas. The clinical signs are polymorphic and often misleading, such as an acute intestinal obstruction, a sub-occlusive syndrome or sometimes a nonspecific abdominal syndrome [6]. Because of these nonspecific symptoms, intussusception can be misdiagnosed. Increased computed tomography scan to evaluate patients with abdominal pain can contribute to a reliable preoperative diagnosis. The abdominal ultrasound associated with colour Doppler is a rapid examination that can reveal the invagination coil [1], but it is not useful in diagnosing adult intussusceptions. The CT scanner has proved to be more accurate, with an accuracy of almost 100%, by showing two typical images: a "sandwich" image in longitudinal section showing the head of the acute intestinal invagination and a "cockade" image in cross-section showing the coil of the acute intestinal invagination [7]. The surgical approach is influenced by the prevalence of associated malignancy, the anatomic site, and various local factors such as the degree of associated ischemia of the involved bowel [2]. Primary surgical resection without prior reduction is the treatment of choice in colocolic adult intussusception [8,9,10].

Conclusion:

Adult intussusception in adults highlights the importance of two key points: the CT scan as the conventional way to confirm the diagnosis; and oncologic resection without previous reduction as the preferred treatment currently.

Conflicts of interest : we disclose any financial and personal relationships with other people or organisations that could inappropriately influence our work

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Figures List:

Fig. 1.a: Axial abdominal CT scan view showing typical target sign of intussuscepted bowel (arrow)

Fig. 1.b: Sagittal abdominal CT scan with image of intussuscepted colon (arrow)

Fig.2: Gross examination of the resected specimen reveals a 40 cm Colo-colic intussusception (arrow)

Consent statement : Written informed consent was obtained from the patient to publish this report in accordance with the journal's patient consent policy.



