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Radiology

## **Intussusception in Adults with Small Intestine Lipoma**

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#### Abstract

Case Report

The intussusception is rare in adults. It has diverse etiologies; in most cases, it is secondary to a benign or malignant tumor. The lipoma on intussusception remains exceptional. Imaging mainly dominated by ultrasound and CT scan allows a positive and above all etiological diagnosis of the disease by showing evocative images. We report a case of intestinal intussusception caused by a lipoma.

Keywords: Intestinal Intussusception - Adult - Lipoma.

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### **INTRODUCTION**

The acute intussusception in adults is a rare, difficult and often delayed to diagnose. An organic etiology is frequently the cause. The treatment is always surgical.

In adults, the treatment is surgical, based on intestinal resection, although there is still an ongoing debate about the necessity of prior reduction of the intussusceptum [1, 6]. Based on this new case and after reviewing the literature, we discuss the clinical

We report a rare case of ileo-ileal, intussusception, the diagnosis was suggested abdominopelvic CT scan.

#### **OBSERVATION**

Patient aged 56-year-old, without specific medical history, admitted to emergency department for abdominal pain, lasting for two days, with melena without signs of bowel obstruction. Physical

examination shows a patient with good hemodynamic and respiratory condition the rest of the clinical examination found no abnormalities.

On admission, the clinical examination revealed a distended abdomen with tympany on percussion, slightly tender, a palpable mass, and the hernial orifices were free. The patient was afebrile. There was no recent deterioration in general condition. The rectal examination was normal. The rest of the clinical examination was normal. Routine laboratory tests were unremarkable.

An abdominopelvic CT was performed. A typical image of intestinal intussusception with a double digestive wall was displayed at the ascending colon. An endoluminal mass (Fig 1) measuring 30 mm in its widest-axis, well limited, with homogeneous fat density, unmodified by the contrast injection was visible in contact with the intussusceptum. The radiological diagnosis was a lipoma complicated by intestinal intussusception.

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Figure 1 (a, b): Abdominal CT after contrast agent injection, cuts (a) and coronal (b): ileocecal intussusception with a double digestive wall at the ascending colon (a, b); Mass well limited, with homogeneous fat density, unmodified by the contrast injection in contact with the intussusceptum (arrow) (b)

The surgery was performed immediately, confirming the diagnosis, an anastomotic resection was performed. The postoperative follow up was simple.

Histological examination confirmed the presence of a benign submucosal lipoma.



Figure 2(a, b): Operating picture of intestinal intussusception (a), and part of ileocecal resection (b)

### **DISCUSSION**

Of all causes of intestinal obstruction in adults, intussusception represents only 5%. In adults, it is often secondary to an organic cause (90% of cases) [1] benign or malignant tumor (50 to 90% of cases) or inflammatory lesions (appendicitis, Meckel's diverticulum), or scarring adhesions. Benign tumors are mostly found in small intestine, while malignant tumors are more likely to be found in colon. As for lipomas, they can be found at all levels of digestive tract, but most frequently in the colon (70%) [2] and only 20 to 25% of cases in small bowel [2]. Intussusception is rare in adults and always related to a parietal anomaly, either malignant such as (metastasis, lymphoma) or benign such as (lipoma, inverted Meckel's diverticulum, adenomatous hamartomatous polyp or Peutz-Jeghers syndrome). It is rarely a cause of real occlusion but rather painful subocclusion [3]. It can be ileo-ileal, ileocecal or colocolique. The intussusceptum can be palpated; it is associated with other symptoms of acute intestinal obstruction [3].

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On the plain abdominal x ray an ileocolic or ileo-ileal intussusception may be suspected in front of a homogeneous rounded opacity of fluid contrast confined on one side by a bright crescent and may include within it clear arc shape image that give an appearance of "spring coil" [4].

Ultrasound can visualize introverted loops into each other with concentric images in cross sections in double "target" in "eight" or in "rosette" and the presence of a rounded mass syndrome enveloped by the intestinal wall at its distal end [3, 5].

The sensitivity of CT scan to correctly diagnose intussusceptions has been reported from 71.4%-87.5% while its specificity in adults has been reported to be 100% as verified by the subsequent surgery. The CT scan can confirm the diagnosis by identifying a mass of tissular density corresponding to the edematous wall of the introverted loop, along with a fat density image of "crescent" corresponding to the mesentery [3, 6]. The invaginated wall is sometimes separated from the intestinal wall by air or contrast agent (Spring Coil sign). More specific is the direct visualization of the intussusceptum body presenting as multiple concentric rings hypo and hyperdense. CT scan may identify the underlying cause (lipoma of fat density) and assess the upstream distension of intestinal loops [3, 6]. It is the ideal method of exploration. If the intussusception is complicated with ischemic suffering by strangulation of the vascular pedicle, the edematous thickening of the walls and the invaginated portion of the mesentery transform the original image into a homogeneous mass content, kidney-shaped, constituting a sign of severity and urgent indication for surgery [7].

### CONCLUSION

The intussusception is rare in adults. Imaging essentially dominated by ultrasound and CT scan that allows a positive and especially etiological diagnosis of the disease by showing suggestive images. CT scans can confirm the fatty nature of the lipoma. In adults, the treatment is always surgical.

## **Références**

- 1. Azar, T., & Berger, D. L. (1997). Adult intussusception. *Annals of surgery*, 226(2), 134-138.
- Oyen, T. L., Wolthuis, A. M., Tollens, T., Aelvoet, C., & Vanrijkel, J. P. (2007). Ileo-ileal intussusception secondary to a lipoma: a literature review. *Acta chirurgica Belgica*, 107(1), 60-63.
- Bentama, K., Chemlal, I., Benabbou, M., El Abssi, M., El Ouananni, M., Cherrab, M., ... & Chekoff, R.

- (2012). Acute intussusception secondary to a lipoma of the small intestine: about a case and review of the literature. *The Pan African Medical Journal*, *12*, 98-98.
- Lebeau, R., Koffi, E., Diané, B., Amani, A., & Kouassi, J. C. (2006, October). Invaginations intestinales aiguës de l'adulte: analyse d'une série de 20 cas. In *Annales de chirurgie* (Vol. 131, No. 8, pp. 447-450). Elsevier Masson.
- Ross, G. J., & Amilineni, V. (2000). Case 26: Jejunojejunal intussusception secondary to a lipoma. *Radiology*, 216(3), 727-730.
- 6. Oukachbi, N., & Brouzes, S. (2010). Enteric intussusception in an adult due to a lipoma. *Gastroenterologie clinique et biologique*, *34*(6-7), 413-415.
- 7. Darouichi, M. (2011). Invagination iléocæcale. *Feuillets de radiologie*, *51*(3), 136-140.
- Chiu, H. T., Yen, H., Weng, Y. S., Chen, C. Y., Lin, K. H., Chen, P. H., ... & Pu, T. W. (2022). Combined ileoileal and ileocolic intussusception secondary to inflammatory fibroid polyp in an adult: a case report. *Medicina*, 58(2), 310. doi: 10.3390/medicina58020310
- Di Buono, G., Randisi, B., Romano, G., Ricupati, F., Buscemi, S., & Agrusa, A. (2020). Recurrent intussusception of small bowel in a young patient due to metastases from cardiac undifferentiated pleomorphic sarcoma: A first ever case report. *International Journal of Surgery Case Reports*, 77, S13-S16. doi: 10.1016/j.ijscr.2020.09.065
- Arshad, S. A., Hebballi, N. B., Hegde, B. N., Avritscher, E. B., John, S. D., Lapus, R. M., ... & Kawaguchi, A. L. (2022). Early discharge after nonoperative management of intussusception is both safe and cost-effective. *Journal of Pediatric Surgery*, 57(1), 147-152. doi: 10.1016/j.jpedsurg.2021.09.047
- Subramaniam, S., Chen, A. E., Khwaja, A., & Rempell, R. (2022). Point-of-care ultrasound for differentiating ileocolic from small bowel-small bowel intussusception. *The Journal of Emergency Medicine*, 62(1), 72-82. doi: 10.1016/j.jemermed.2021.07.002
- Goyal, P., Nohria, S., Grewal, C. S., Sehgal, R., & Goyal, O. (2022). Celiac disease and intussusception-a rare but important association. *Acta Gastroenterol Belg*, 85, 111-112. doi: 10.51821/85.1.7959
- Zhang, B., Wu, D., Liu, M., Bai, J., Chen, F., Zhang, R., & Fang, Y. (2021). The diagnosis and treatment of retrograde intussusception: a single-centre experience. BMC Surg, 21, 398. doi: 10.1186/s12893-021-01391-0