

Ileo-ileal intussusception secondary to a lipoma

Abstract

Acute intestinal intussusception is a pathology of infants and the little child. Its occurrence in adults is very unusual. It is of diverse etiology. Lipoma is rare in the tube digestive. Intestinal intussusception on lipoma is exceptional. We report a case of small intestinal intussusception on lipoma.

Key words: Small bowel, Obstruction, Intussusception, Lipoma

Introduction

Intussusception is a rare cause of intestinal obstruction in adults, accounting for <5% cases. The clinical presentation in adults is vague and nonspecific, thereby complicating differential diagnosis [1-3]. Intussusception is telescoping of a proximal segment of the bowel, called the intussusceptum, into the distal portion, called the intussuscepiens [7-9]. Intussusception usually affects children, and is an uncommon condition in adults, accounting for 5% of all cases [4-6].

Case Presentation

A 45-year-old female patient admitted to the emergency for diffuse abdominal pain with notion of cessation of fecal material and gases and fecal vomit. She

had no particular medical history. The patient reported episodes of intermittent abdominal pain since 2 months. Clinical examination revealed abdominal distention with percussion tympanism. Pelvic touches were normal. The biological assessment revealed hyperleukocytosis at 17,400/mm³ and functional renal failure (blood urea nitrogen at 1.5 g/l and blood creatinine at 28 mg/l). An unprepared abdomen showed hail-like hydro-aerial levels. An abdominal CT scan showed jejuno-jejunal intussusception with a target sign (Figure 1).

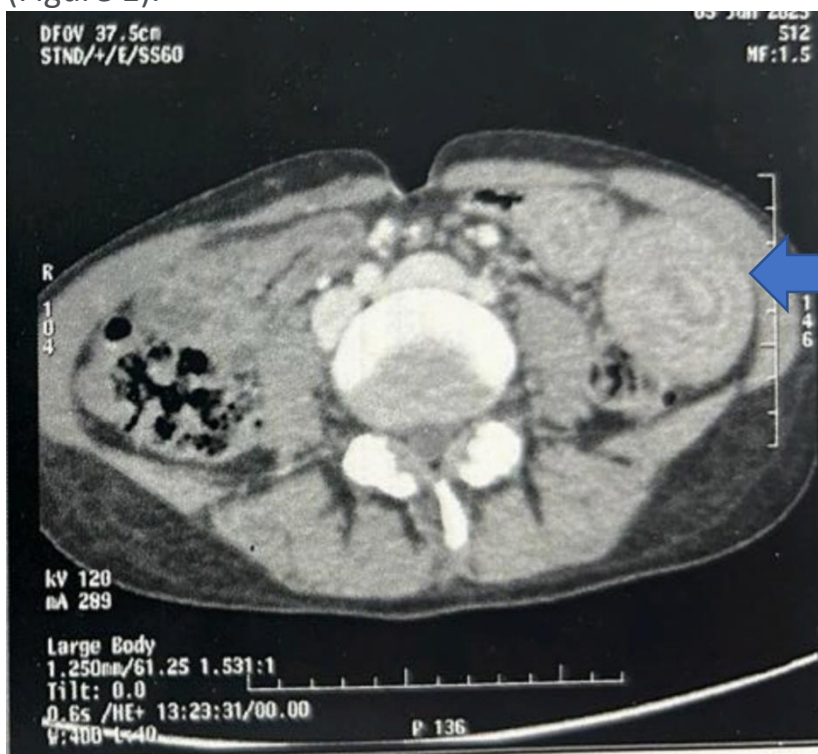


Figure 1 : CT scann showing target sign

During the surgery, we proceeded to small intestine resection removing the intussusception tube which located 60 cm from the ileocecal valve with anastomosis termino-terminal (fig. 2). The anatomopathological study

was in favor of a submucosal lipoma responsible for intussusception . The post-operative care was simple with a good clinical evolution.

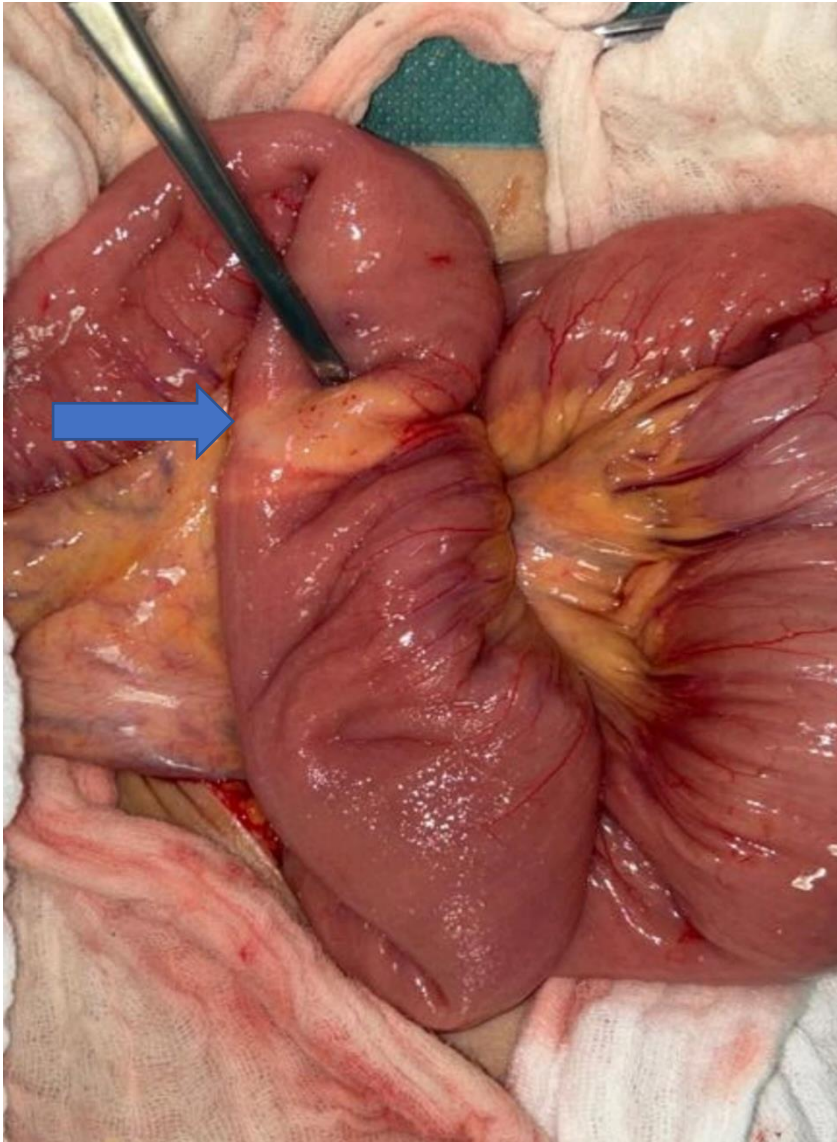


Figure 2: Lipoma in the small bowel

Discussion

Intestinal intussusception is defined by penetration of an intestinal segment (invaginated loop) into the downstream segment (receiving loop). It mainly

occurs in infants (80% between 6 months and 2 years) (1). Considered as idiopathic in more than 90% of cases, intussusception intestinal may be secondary (most often before the age of 3 months or after 5 years: digestive lymphoma, polyp juvenile, Meckel's diverticulum, ectopic pancreas, etc.). The ileo-colonic forms are the most common.

The small bowel intussusception is rare (2). Clinically, it manifested by paroxysmal abdominal pain, incessant cries with refusal of a bottle, vomiting, rectal bleeding and a palpable mass "sausage-shaped".

Adult involvement, as in our case, is rare (1). In effect on 469 cases of acute intestinal obstruction in adults reported by Lebeau et al. (3), only 20 cases presented an acute intestinal intussusception. Their evolutionary mode is usually subacute or chronic. This is the case of our patient, who presented recurrent pain probably due to episodes of intermittent intussusception.

These intussusceptions are most often secondary (4,5). Malignant tumor pathology is the first etiology in question. Unlike children, they are ileo-ileal, ileocolic, colo-colic or jejuno-gastric without predilection anatomical (1). The lipomatous etiology is exceptional.

In fact, only 28 cases are reported in the literature.

Lipoma is a rare lesion of the digestive tract. They reach electively the ileum near the ileocecal valve and the proximal jejunum. The tumor, initially located under the mucosa, grows towards the lumen by pushing back the mucous membrane. These tumors are generally asymptomatic.

The appearance of clinical manifestations is correlated with their size (from 4 cm) then responsible for acute pain, occult bleeding due to ulceration of the mucosa and of intestinal intussusception (4). On the radiological level,

standard x-rays highlight signs of small intestine occlusion.

Ultrasound constitutes an unavoidable examination in the exploration of the acute abdomen. Intestinal intussusception appears in the form of a roundel image, with a hyperechoic center (light of the invaginated handle) and with a multi-stratified crown (digestive walls upturned and attached): target sign.

The appearance CT scan of intestinal intussusception is pathognomonic. It highlights: (1) a tissue density mass comprising an alternation of concentric zones in a hypo roundel and hyperdense corresponding to blood sausage; (2) surmounted by an eccentric "crescent" image of fat density, corresponding to the mesentery and vessels; (3) the invaginated wall is separated from the intestinal wall by air or contrast agent; (4) the cause of the intussusception; (5) the degree of upstream hial distension and signs of suffering intestinal (4–6). The treatment is essentially surgical.

Conclusion

Acute intestinal intussusception secondary to a lipoma is rare. The imagery mainly dominated by ultrasound and scanner allows a diagnosis positive and above all etiological of the condition. The scanner remains effective in identifying the fatty nature of the lipoma.

Consent

As per international standards or university standards, patient(s) written consent has been collected and preserved by the author(s).

References

1. Sharma A, Thakur A. Ileocolic intussusception due to intestinal lipoma in an adult patient. *Clinical Case Reports*. 2021 Mar;9(3):1524-8.
2. Begos DG, Sandor A, Modlin IM. The diagnosis and management of adult intussusception. *Am J Surg*. 1997;173(2):88-94. [[PubMed](#)] [[Google Scholar](#)]
3. Eisen LK, Cunningham JD, Aufses AH. Intussusception in adults: institutional review. *J Am Coll Surg*. 1999;188(4):390-395. [[PubMed](#)] [[Google Scholar](#)]
4. Namikawa T, Hokimoto N, Okabayashi T, et al. Adult ileoileal intussusception induced by an ileal lipoma diagnosed preoperatively: report of a case and review of the literature. *Surg Today*. 2012;42:686-692. [[PubMed](#)] [[Google Scholar](#)]
5. Hurwitz MM, Redleaf PD, Williams HJ, Edwards JE. Lipoma of the gastrointestinal tract. An analysis of seventy-two tumors. *Am J Roentgenol Radium Ther Nucl Med*. 1967;99:84-89. [[PubMed](#)] [[Google Scholar](#)]
6. Mouaqit O, Hasnai H, Chbani L, et al. Adult intussusceptions caused by a lipoma in the jejunum: report of a case and review of the literature. *World J Emerg Surg*. 2012;7:28. [[PMC free article](#)] [[PubMed](#)] [[Google Scholar](#)]
7. Deng KH, Wei DH, Liu W. Ileo-Ileal Intussusception by Burkitt's Lymphoma. *Journal of Gastrointestinal Surgery*. 2023 Oct;27(10):2266-7.
8. Güzel G, Ergenç M. Recurrent Ileo-ileal Intussusception Caused by Inflammatory Fibroid Polyp: A Rare Case Report. *Archives of Iranian Medicine*. 2023 Jun 1;26(6):355-7.
9. Houidi S, Houas Y, Thamri F, Mehrzi O, Jouini R. Ileo-ileal intussusception revealing a "Rapunzel syndrome": Case report and literature review. *Journal of Pediatric Surgery Case Reports*. 2023 May 1;92:102606.