

## Ileal lipoma: A rare cause of ileo-colic intussusception in adult

### Ileal lipom: Erişkinlerde nadir bir ileokolik intususepsiyon nedeni

Ahmed Zerhouni<sup>1</sup>, Mourad Badri<sup>1</sup>, Anas Belhaj<sup>1</sup>, Karim Ibn Majdoub<sup>1</sup>, Imane Toughrai<sup>1</sup>, Khalid Mazaz<sup>1</sup>

<sup>1</sup> Visceral and Endocrinological Surgery Service II, Chu Hassan II, Fes, Morocco

ORCID ID of the authors

AZ: 0000-0001-8441-016X

MB: 0000-0001-5085-0941

AB: 0000-0002-1118-1594

KIM: 0000-0001-7646-685X

IT: 0000-0003-0401-3012

KM: 0000-0001-7779-7802

#### Abstract

We report in this publication a case of acute intestinal intussusception on ileal lipoma in a 40-year-old patient that has been diagnosed on an emergency abdominopelvic CT scan for an occlusive syndrome. The treatment consisted of manual disinvagination with resection of the thin portion of the small bowel containing the lipoma and a mechanical anastomosis.

**Keywords:** Lipoma, Intussusceptions, Adult

#### Öz

Bu yayında, oklüzif bir sendrom için acil abdominopelvik BT taraması tanısı konan 40 yaşında bir hastada ileal lipomda akut intestinal intususepsiyon olgusunu sunduk. Tedavi, lipomayı ve mekanik bir anastomozu içeren ince bağırsağın ince kısmının rezeksiyonu ile manuel definvagasyondan oluşuyordu.

**Anahtar kelimeler:** Lipom, Intussusceptions, Yetişkin

#### Introduction

Acute intussusception in adults is rare; it represents 1 to 5% of obstruction causes in adults and its diagnosis is difficult and usually late. In the adult, an organic cause of intussusceptions is often found and the treatment is always surgical [1-3]. A case of bowel obstruction admitted to the emergency room, generated a lot of interest from the guard team; it is the case of an adult who had an intussusception of the small intestine on the colon, due to the presence of a lipoma. The surgery was minimalist and the evolution was towards healing. The rarity of the case has led us to want to share it with the scientific community.

#### Case presentation

A 40 years old patient, who has been smoking for 20 years, was admitted to the emergency room for peri-umbilical and right iliac fossa abdominal pain of sudden onset, rebellious to symptomatic treatment, associated with a bowel obstruction. The patient was in good general condition stable with a blood pressure at 140/80 mmHg, the heart rate was 89 beats / min, and apyrexia. On the other hand, abdomen was distended, tympanic and painful requiring the administration of the morphine derivative. However, no abdominal mass was noted, water-air noises were present, and hernia areas were free. The usual laboratory tests did not show leukocytosis (whites at 9000 / mm), anemia (Hemoglobin at 14.5g / dl), correct kidney function and the rest of the biological parameters were also correct. An abdominal x-ray did not find any pneumoperitoneum, but it revealed the presence of diffuse hydroaeric levels. Abdominal CT was urgently indicated and referred to the diagnosis by showing the presence of an invaginated intestinal loop over a 30mm oval lump, of a lipoma-like fat nature.

In this case of small bowel – large bowel invagination on a lipoma, the surgical intervention was carried out urgently, and the operative exploration showed the presence of a distended intestinal upstream over an invagination of about 80 cm of the colonic ileum (Figure 1).

Corresponding author / Sorumlu yazar:

Mourad Badri

Address / Adres: Visceral and Endocrinological Surgery Service II, Chu Hassan II, Fes, Morocco  
e-Mail: mouradbadi79@gmail.com

Informed Consent: The author stated that the written consent was obtained from the patient presented in the study.

Hasta Onamı: Yazar çalışmada sunulan hastadan yazılı onam alındığını ifade etmiştir.

Conflict of Interest: No conflict of interest was declared by the authors.

Çıkar Çatışması: Yazarlar çıkar çatışması bildirmemişlerdir.

Financial Disclosure: The authors declared that this study has received no financial support.  
Finansal Destek: Yazarlar bu çalışma için finansal destek almadıklarını beyan etmişlerdir.

Received / Geliş tarihi: 29.05.2018

Accepted / Kabul tarihi: 29.06.2018

Published / Yayın tarihi: 03.07.2018

Copyright © 2018 The Author(s)  
Published by JOSAM

This is an open access article distributed under the terms of the Creative Commons Attribution-Non Commercial-NoDerivatives License 4.0 (CC BY-NC-ND 4.0) where it is permissible to download, share, remix, transform, and build upon the work provided it is properly cited. The work cannot be used commercially without permission from the journal.



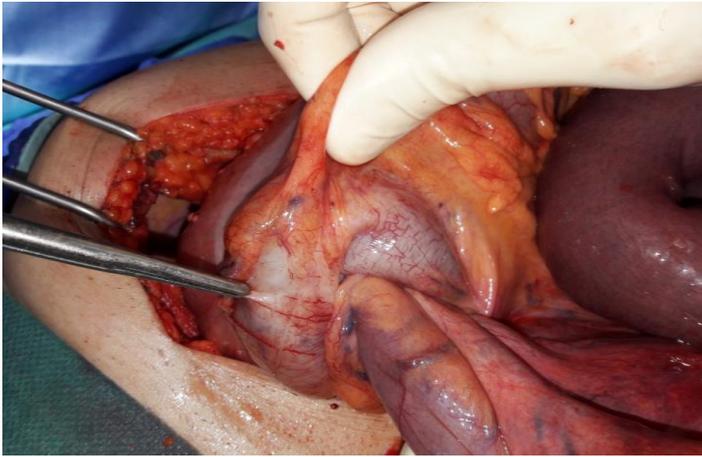


Figure 1: Image showing the intussusception

The gesture consisted in a manual extroversion with discovery of a 30 mm lipoma located 70 cm from the ileocecal angle (Figure 2).



Figure 2: The lipoma in the small bowel after extroversion

Then, we proceeded to the resection of the portion of the intestine containing the lipoma, and the making of a latero-lateral mechanical anastomosis. The follow-ups were ordinary, with a hospital stay of 4 days. Anatomopathological examination of the operative specimen confirmed the fatty nature of the resected mass (Figure 3).



Figure 3: Lipoma after extraction

## Discussion

Intestinal intussusception is defined by a smashing intestinal portion into the underlying portion. It is much more common in children but rare in adults, since only 5% of them occur in adults [1,2]. In adults, it is often secondary to an organic cause in 90% of cases, either a benign or malignant tumor (50 to 90% of cases), or inflammatory lesions (appendicitis, Meckel diverticulitis), or cicatricial adhesions. In the small intestine, there are most frequently benign tumors, unlike the colon where most often there are malignant causes. Lipoma can be found at all levels of the digestive tract, but it is often seated in the colon in 70% of cases [3] and only in 20 to 25% of cases the lipoma is

in the small bowel. It is often unique and develops in the submucosal layer of the intestinal wall. Primary malignant tumors (adenocarcinoma, lymphoma, carcinoid, leiomyosarcoma) or metastatic (melanoma) represent 6 to 30% of cases.

Intussusception is rarely idiopathic in adults (less than 10% of cases) [4], mostly ileoileale. The diagnosis is difficult and most of the time is intraoperative. It is frequently manifested by nonspecific and variable signs of episodic occurrence, favoring delayed diagnosis; more rarely, it is manifested by an acute syndrome related to occlusion or perforation with acute peritonitis. CT scan is the better suited [5] to distinguish intussusception from other causes of intestinal obstruction. It shows a tissue density corresponding to the edematous wall of the invaginated loop, accompanied by an eccentric crescent image of greasy density corresponding to the mesentery. Sometimes, it identifies the causal lesion (fat density of a lipoma). The surgical procedure must be systematic in the adult, which makes it possible to carry out an intestinal resection taking away the cause. It is reasonable not to make any attempts at withering and to consider from the start a resection of the affected small bowel in the case where the presence of a malignant tumor is suspected. In this case, the resection should be wide and oncologic. In the late stage of irreversible necrosis, it is better to perform a resection without intestinal extroversion. In case the diagnosis is made early, at a stage without ischemia or intestinal necrosis, the first reduction is justified. The laparoscopic approach of a small intussusception could be performed immediately if the preoperative imaging evokes the existence of a benign cause and if the patient is seen early [6]. In the case of colonic intussusception, laparoscopy does not seem appropriate because of the frequency of malignant tumors.

## Conclusion

Intestinal intussusception can occur on any segment of the digestive tract. It is rare in adults and the diagnosis is difficult. The CT scan is the ideal test to make the diagnosis and highlight the etiology. The treatment is always surgical in the adult. The ileocolic invagination is most often of benign cause. Invagination can be reduced by laparoscopy.

## References

1. Ahn JH, Choi SC, Lee KJ, Jung YS. A clinical overview of a retrospective study about adult intussusceptions: focusing on discrepancies among previous studies. *Dig Dis Sci.* 2009 Dec; 54(12):2643–9.
2. Balik AA, Ozturk G, Aydinli B, Alper F, Gumus H, Yildiran MI, Basoglu M. Intussusception in adults. *Acta Chir Belg.* 2006;106:409–12.
3. Oyen TL, Wolhuis AM, Tollens T, Aelvoet C, Vanrijkel JP. Ileo-ileal intussusceptions secondary to a lipoma: a literature review *Acta Chir Belg.* 2007; 107:60-3.
4. Amoruso M, D'Abicco D, Praino S, Conversano A, Margari A. Idiopathic adult colo-colonic intussusception: Case report and review of the literature. *Int J Surg Case Rep.* 2013; 4(4): 416–418.
5. Eisen LK, Cunningham JD, Aufses AH. Intussusception in adults: institutional review *J Am Coll Surg.* 1999;188:390-5.
6. Yamaguchi S, Fujii S, Ike H, Shimada H. Laparoscopic reduction of appendiceocecal intussusception due to mucinous cystadenoma in an adult. *JSLs.* 2004;8(3):279–82.