

## Ileocolic Intussusception Secondary to a Small Bowel Lipoma

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Received: March 10, 2021; Published: April 06, 2021

### Abstract

Intussusception of the small bowel is found to be a rare cause in bowel obstruction. In adults, specific intraluminal pathologies are usually found. Malignancy can be expected especially in ileocolic intussusception. We present a case with a rare cause of benign ileocolic intussusception in a 45-years old man with a history of altered stool habits and intermittent pain. The diagnosis of an intussusception was achieved by means of abdominal CT scan. The Client underwent laparoscopic surgery, which confirmed ileocolic intussusception with a tumor like lesion. It required open reduction and resection of the affected segment due to suspected malignancy. The tumor revealed as a pendulum lipoma.

**Keywords:** Intussusception; Ileocolic Intussusception; Bowel Obstruction; Small Bowel Lipoma

### Introduction

Small bowel intussusception is one of the rare causes of bowel obstruction in the adult. It can be found with an incidence of about 1% [1]. While in children it tends to occur due to a motility disorder, it is predominantly due to an organic cause in adults. The disease progresses acutely or with a delayed symptomatic latency. Symptoms range from diarrhea, nausea and vomiting to the picture of an acute abdomen. We present a rare benign case of ileocolic intussusception secondary to a small bowel lipoma.

### Case Report

A 45-years-old man presented to the emergency department. He complained of 4 weeks of diarrhea some of which is watery, alternating with stools some of which are strand-like. The patient had vomited once. The patient described intermittent acute pain in the right lower abdomen. Symptoms occurred 3 to 4 times and were rated as 6/10 VAS.

There were no pre-existing medical conditions or medications.

On clinical examination, an obese patient with a normal gait entered the examination room. His vital signs were normal. Face without perioral pallor. Tongue was moist. Abdomen was tense, but the abdominal wall without signs of peritonism. There was no contralateral release pain, but tenderness in the right lower abdomen. Bowel sounds were brisk and high-pitched. On examination, the ampoule was empty.

Laboratory findings were largely unremarkable with no signs of inflammation. Renal, liver and electrolyte values were normal.

On ultrasound examination, there were dilated small bowel loops in the mid and lower abdomen, abundantly filled with feces and fluid with partial orthograde, and partial pendulous peristalsis. No free fluid. Normal upper abdominal organs.



The subsequent CT scan showed intussusception of the terminal ileum into the cecum. The small bowel loops were dilated, which was in keeping with a small bowel obstruction.

### CT and intraoperative findings

After the preoperative preparation, the laparoscopic exploration was conducted. The CT morphological picture was confirmed. The terminal ileum had bulged over a distance of 40 cm into the cecum and ascending colon. It was only possible to partially reduce the ileum. An indurated section was noticed, which hindered complete reduction. Laparoscopic surgery was converted into laparotomy. The suspicious section appeared as a stemmed tumor, which was removed with a segmental resection. The postoperative course was without complications.

Histological findings revealed a lipoma without evidence of malignancy.

### Discussion

Intussusception as a cause of bowel obstruction in adults is rare. In the patient population of Azar (1997), it was 1%, in Rodriguez-Lopez [2] patients with bowel obstruction 1 to 5%. Intussusception is classified into four categories: enteric, ileocolic, ileocecal and colonic. Ileocolic intussusceptions are defined as those with prolapse of the ileum through the ileocecal valve into the colon.

The ileum below Treitz' flexure is predominantly involved in more than 80% [3]. The causes of adult intussusception are specific intraluminal pathologies in up to 90% [2,4] as opposed to idiopathic causes. Malignant tumors account for two-thirds of these, whereas specifically in ileocolic intussusceptions malignancies, e.g. adenocarcinomas are found in almost 100% [5].

Preoperative diagnosis with ultrasound and CT is suitable to detect the intussusception. The treatment consists of surgical intervention with a segmental resection taking into account the possible underlying malignant pathology [5,6].

In our case, exploratory laparoscopy confirmed the CT findings of intussusception but also yielded a suspected tumor, which proved to be a gross vascularised mass at laparotomy. Resection was performed under suspicion of malignancy. This would have been regarded as a curative R0 resection in view of the potentially underlying pathology. The histological result revealed a stemmed lipoma. The lipoma can be regarded as a rare benign cause as the overwhelming majority of causes for an ileocolic intussusception were found to be malignant [5].

Historically, intussusception in adults is being treated surgically because of possible underlying malignancy. More recently, the widespread use of CT/MRI imaging has contributed to an increased frequency of a radiological diagnosis of intestinal intussusceptions. These can be associated with ambiguous or absent gastrointestinal symptoms [7]. Retrospective studies show successful non-surgical treatment in 82% of radiographic intestinal intussusceptions even with gastrointestinal symptoms, which has led to some controversy about the optimal treatment of these patients [8]. However, the length of the graft in these patients was less than 3.5 cm [9].

### Conclusion

Intussusception in an adult is a rare cause of bowel obstruction and ileocolic intussusception caused by a benign cause is also rare. The diagnosis of a lipoma as a cause of intussusception must be considered as part of the differential diagnosis.

### Bibliography

1. Azar T and Berger DL. "Adult intussusception". *Annals of Surgery* 226 (1997): 134-138.
2. M Rodriguez-Lopez, et al. "A Tapia-Herrero: Ileocecal intussusception extending to left colon due to endometriosis". *Annals of the Royal College of Surgeons England* 100.3 (2018): e62-e63.
3. Balik AA, et al. "Intussusception in Adults". *Acta Chirurgica Belgica* 106.4 (2006).
4. Zubaidi A, et al. "Adult intussusception: a retrospective review". *Diseases of the Colon and Rectum* 49.10 (2006): 1546-1551.
5. Marsicovetere P, et al. "Intestinal intussusception: etiology, diagnosis, and treatment". *Clinics in Colon and Rectal Surgery* 30.1 (2017): 30-39.
6. Emmanuel R, et al. "Ileocolic intussusception due to a cecal endometriosis: case report and review of literature (2012): 62.
7. Kim YH, et al. "Adult intestinal intussusception: CT appearances and identification of a causative lead point". *Radiographics* 26.3 (2006): 733-744.
8. Rea JD, et al. "Approach to management of intussusception in adults: a new paradigm in the computed tomography era". *The American Journal of Surgery* 73.11 (2007): 1098-1105.
9. Lvoff N, et al. "Distinguishing features of self-limiting adult small-bowel intussusception identified at CT". *Radiology* 227.1 (2003): 68-72.

**Volume 8 Issue 5 May 2021**

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