Ileal and Colic Lipoma: Rare Cases of Bowel Intussusception in Adults

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Abstract: Gastrointestinal lipomas are rare benign tumors and intussusception due to a gastrointestinal lipoma constitutes an infrequent clinical entity. Lipoma may develop as a benign tumor in all organs and rarely in large or small intestine ileal and colic lipoma. We reported two rare cases of bowel intussusception in adults. The invagination was diagnosed by computed tomography scan. Exploratory laparotomy revealed the intussusceptions secondary to a lipoma which was successfully treated with segmental intestinal resection. Since adult intussusception is frequently associated with malignant organic lesions, being aware of the differential diagnosis is important and timely surgical intervention paramount. The anatomopathology is essential for the diagnosis definitive and the search of malignitis signs.

Key words: Bowel intussusception, ileal and colic lipoma.

1. Background

Intussusception in adults is a rare condition, in contrast to paediatric intussusception where the majority of cases are idiopathic [1]. 90% of adult cases have identifiable aetiology. Adult intussusception is uncommon, accounting for 1%-5% of intestinal obstructions in adults[2]. We present two cases of intussusception due to a gastrointestinal lipoma in adult patients.

2. Presentation of Cases

2.1 Case 1

A 53-year-old female was admitted to the emergency department, with history of abdominal pain and distention since 7 days, insidious in onset and gradually progressing. It was localized centrally, associated with occasional vomiting and constipation. She was haemodynamically stable and afebrile. On per abdomen examination, the abdomen was slightly distended, with no sign of peritonism. Laboratory investigations revealed correct hemoglobin of 12 g/dL and white cell counts of 9,000 mm³. Liver function, renal function test and electrolytes were within normal values. Plain X-ray of the abdomen showed multiple air-fluid levels. Contrast enhanced CT (computed tomography) scan of the abdomen showed ileoileal intussusception with bowel obstruction upstream. A lobulated fat-density lesion suspicious of lipoma was seen as the lead point (Fig. 1).

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Fig. 1 Ileoileal intussusception with bowel obstruction upstream.
An explorative laparotomy showed ileoileal intussusception without gangrene. Limited ileal resection was performed. The gross specimen showed a polyp of 3.5 × 2 cm as the lead point. Histopathological analysis of the polypomatous growth came out as lipomatous polyp of the ileum without any evidence of malignancy.

### 2.2 Case 2

A 65-year-old lady without medical or surgical history presented to our department for abdominal colicky pain. It was exacerbated by eating and she reported a reduced appetite. On examination, she was apyrexial and vital signs were all within normal limits.

Abdominal examination revealed a soft abdomen, with sausage-shaped mass of the right flank (without distension). Laboratory blood tests were unremarkable. Abdominal ultrasound sonography and CT scan showed sausage-shaped mass presenting as a target sign, suggestive of intussusception. A lobulated fat-density lesion suspicious of Lipoma was seen as the lead point (Fig. 1).

Exploratory laparotomy revealed the right colon which telescoped in the transverse colon and caused colo-colonic intussusception (Fig. 2). Right hémicolectomy (without reduction) was performed with ileo-transverse colon anastomosis and pathology documented a mature submucosal lipoma acting as a leading point for the intussusception, 27 negative lymph nodes out of 27, the excision limits were not reached. There was no evidence of malignancy. The coloscopy was requested two months after the surgery, it showed no abnormality.

### 3. Discussion

Intussusception in adults is rare. Gastrointestinal lipomas are rare benign tumors and intussusceptions since a gastrointestinal lipoma constitutes an infrequent clinical entity[3]. Lipoma may develop as a benign tumor in all organs and rarely in large or small intestine [4].

Adult intussusception is extremely rare, it has non-specific symptoms, and can sometimes mimic a malignant tumor when presenting with signs of bowel obstruction[5-6]. Occasionally patients may present with intermittent abdominal pain, nausea, vomiting, lower gastrointestinal bleeding, diarrhea, constipation and obstruction, with the latter two being the most common symptoms[7]. The malignant transformation of a lipoma is extremely uncommon [8]. On a CT scan, a lipoma has a uniform appearance with fat-equivalent density and smooth borders, however when there is intussusception associated, it may show a heterogeneous appearance reflecting the degree of the ischemia and necrosis [5]. It is generally accepted that most cases of adult colonic intussusceptions will require surgical intervention, with en-bloc resection without reduction of the affected segment due to the high risk of underlying malignancy. Reduction before
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limited resection may be appropriate for cases of small bowel intussusceptions where a pre-operative diagnosis of benign aetiology can be confirmed [9].

4. Conclusion

The lipoma is a rare benign tumor of the digestive tract. The diagnosis of intussusceptions in adults can be difficult because of atypical and episodic symptoms. A high level of clinical suspicion and an abdominal CT scan are most useful tools for making a timely diagnosis. Surgical resection remains the treatment of choice and produces an excellent prognosis.

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