

# Colocolic Intussusception in the Elderly on the Left Side-with an Unusual Presentation

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## ABSTRACT

Intussusception is the telescoping of a segment of the intestine into the distal segment. It is common in children in the first two years of life (90-95%) and it is rare in adults (5-10%). Malignant tumours are more common than the benign tumours in the colon, leading to intussusception in adults, although the reverse is true in the small intestine. Colocolic intussusception in adults due to a benign cause is veryrare . Intussusceptions due to lipomas have been reported on the right side of the colon, especially in the caecum and at the ileocaecal junction. It is even very rare

on the left side of the colon, especially in the splenic flexure in elderly type II diabetic patients. Here, we wish to document a rare case of colocolic intussusception with pedunculated lipoma as the lead point. The CT was diagnostic and the patient underwent a non- oncological resection of the colon. Grossly, a pedunculated lipoma with the cut surface showing lobulated yellow areas was seen. The histological examination showed an ulcerated and infarcted lipoma which caused pressure atrophy of the adjacent mucosal glands.

**Key Words:** Lipoma, Intussusception, Benign

## INTRODUCTION

Colonic intussusception is the telescoping of one segment of the colon into another, usually the proximal into the distal segment, the typical site for which is the ileo-caecal region. More than 95% of the intussusceptions occur in the paediatric age group [Table/Fig-1] [1],[2].

## CASE REPORT

A 65 year old male with hypertension and type II diabetes was admitted with bleeding PR since 3 weeks. Ultrasound revealed the telescoping of the distal colon in the upper half, giving a whorled appearance. There was bowel wall thickening in this area, which was suggestive of polyps/partial intussusceptions.

Sigmoidoscopy revealed an ulcerated area in the splenic flexure and in the descending colon with luminal compression, possibly a mass in the colon. CT showed a well circumscribed intraluminal mass with a density value of fat. Per operative findings showed the telescoping of the proximal part of the distal colon into the distal segment .A non oncological surgical resection was done and end to end anastomosis was performed, thus restoring the bowel continuity. The specimen was sent for HP examination.

## PATHOLOGICAL FINDINGS

The segment of the colon, measuring 25 cm in length, was showing the telescoping of the proximal portion into the distal segment, with a firm mass lesion, mg 9 cm, in its maximum diameter.

The cut surface of the colon showed the lumen of the colon to be entirely occupied by a pedunculated mass lesion. Its outer surface was covered by an exudate. The cut surface showed pale yellow lobulated areas. The adjacent mucosa of the intussusceptum showed atrophic mucosa. Sections were given from the representative areas. [Table/Fig-2], [Table/Fig-3], [Table/Fig-4]. Sections from the distal and proximal resected margins of the colon were unremarkable. Sections from the polypoid mass showed lobulated mature adipocytes with

areas of ischaemic necrosis and dense, acute, over chronic, inflammatory infiltrate. The adjacent areas also showed slings of smooth muscle fibers which separated the lobulations. The surface of the polyp showed inflammatory cells in the form of a cambium layer. The features were diagnostic of intussusception due to a sub mucosal lipoma of the descending colon.

## DISCUSSION

Colonic intussusception mostly occurs in children due to congenital causes, upto the age of 2 years (male: female=3:1).Only 24 cases of intussuception which originated in the colon were reported in the Mayo Clinic over a period of 23 years. Neoplasms are responsible for a majority of the adult intussusceptions and 2/3rd are caused due to malignancy [2],[3].

The most common site is the ileo-caecal region, the most common symptoms being vomiting, cramping abdominal pain, and constipation and the rare symptoms being rectal bleeding and mucoid and bloody stools. Ischaemic changes which lead to necrosis are rare and they account for less than 1%. The consequences may lead to perforation and peritonitis. In adults, colonic intussusceptions are often caused due to an underlying pathology, commonly on the

Infants	Children	Adults
Colonic polyps	Viral infections	Tumours
Diverticular disease	Post Rota viral infections	Adhesions
Gastroenteritis	Non cancerous growth	Surgical scars
Bannayan-Zonana syndrome	Cancerous growth	Mobility disorders
Peutz Jegers syndrome		IBD Hirshprungs disease
Hereditary		Gastroparesis
Abdominal /intestinal tumors		Hirshprungs Disease
Diverticular disease		

**[Table/Fig-1]:** Various causes of intussusception



**[Table/Fig-2]:** Gross appearance of colon showing a pedunculated mass. C/S shows yellow and lobulated areas



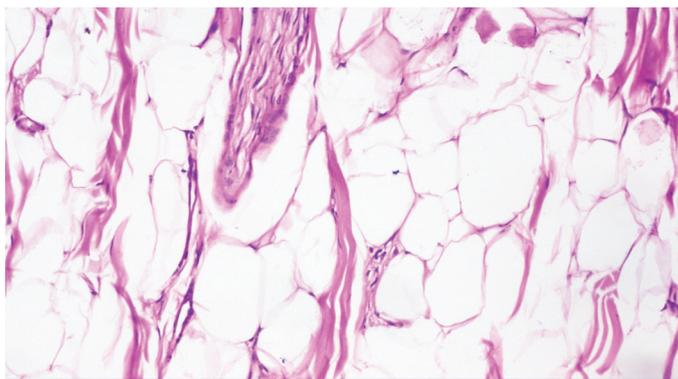
**[Table/Fig-3]:** Gross photograph of resected colonic segment with attached meso colon

right side and more often, due to underlying malignancy. The various causes of intussusception with a descending incidence in children and adults, are as follows: [4] [Table/Fig-1].

Adult intussusceptions most often occur in the flexible regions of the intestine such as the caecum, the sigmoid colon and the transverse colon. Lipomas are the second most common benign tumours of the colon after the adenomas. These tumours are composed of well defined adipose tissue with a clearly demarcated fibrous support structure and most often are submucosal in location. They show lobulated adipocytes and fibrous septae without mesenteric blood vessels[5]. Within the colon, 50% of the lipomas are found in the caecum and in the ascending colon. It is rare to get a benign lesion which leads to intussusceptions on the left side at the splenic flexure (rather than the flexible region) due to infarcted lipomas, especially in the elderly. Here, we document a case of intussusception due to infarcted and ulcerated lipomas in the elderly at the splenic flexure. Our case showed a persistent intussusception, as compared to some of the intussusceptions without a lead point[5],[6].

Intussusceptions can be diagnosed with the help of US/CT. US imaging shows a doughnut shape and bulls eye configuration in the longitudinal and transverse sections. Intussusceptions will appear as a sausage shaped mass when the CT beam is parallel to its longitudinal axis, but will appear as a target mass when the beam is perpendicular to the longitudinal axis of the intussusception [5],[6],[7]. Although the appearance is characteristic, the definite aetiology cannot be established. Similar cases, but of intramuscular lipomas at the splenic flexure, have recently been described by other authors[8].

To conclude, all intussusceptions in adults have to be investigated and operated, to rule out malignancy or organic lesions. It is very rare for the elderly adults to get intussusceptions in the descending colon at the splenic flexure due to lipomas, which present as bleeding per rectum. Intussusceptions need not always be caused due to



**[Table/Fig-4]:** Sections show large areas of ischaemic necrosis in the lipoma, separated by slings of smooth muscle fibers. (10X)

malignancy at this age, but they always require biopsy evaluation and rarely can be corrected by the medical line of treatment.

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