



## Case Report

# Lipoma of small intestine presenting as intussusception: common lesion at uncommon site- A case report

Pooja Agarwal<sup>1</sup>, Lalit Kumar<sup>1,\*</sup>, Nupur Kaushik<sup>1</sup>

<sup>1</sup>Dept. of Pathology, Sarojni Naidu Medical College, Agra, Uttar Pradesh, India



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## ABSTRACT

**Introduction:** Gastrointestinal tract is uncommon location for lipomas. If present, 90% are seen submucosally and 10% in subserosal location. Mostly located in the colon, but they can be found in the esophagus, small intestine, and rarely in the stomach. The vast majority of cases with intestinal lipomatosis are usually asymptomatic and some of the cases present with intermittent obstruction, colonic perforation and rarely intussusception.

**Case Report:** A 20 year male presented in emergency department with history pain in abdomen 15 days back, progressively increasing in intensity and no passage of stool from 4 days. On the basis of history, examination and computed tomography scan of abdomen, possible diagnosis of ileoileal intussusception was made. Patient was admitted in emergency department of surgery and planned for surgery and exploratory laparotomy with resection of ileum 5 cm on both sides was done. A growth was seen in ileal intussusceptum area within 5cm margin and sent for histopathological examination to the department of pathology. On histopathologic examination, a diagnosis of lipoma was made.

**Conclusion:** Lipomas are benign tumours with no risk of recurrence. They should always be kept in the differential diagnosis of sessile polypoid lesions. Surgery is usually curative.

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## 1. Introduction

Gastrointestinal tract is uncommon location for lipomas. If present, 90% are seen submucosally and 10% in subserosal location.<sup>1,2</sup> They are mostly located in the colon, but they can be found in the esophagus, small intestine, and rarely in the stomach.<sup>3</sup> Clinical and postmortem studies reveal an incidence of lipoma varying between 0.2 and 4.4%.<sup>4</sup> Mostly gastrointestinal lipomas are small in size and detected incidentally during endoscopic examination.<sup>5</sup> Usually the vast majority of cases with intestinal lipomatosis are asymptomatic. However, some of the cases present with intermittent obstruction, colonic perforation and rarely intussusception.<sup>6</sup> They are often confused with malignant tumors and most of them are diagnosed after intervention.<sup>3</sup> Computerized tomography (CT) scan or magnetic resonance imaging (MRI) usually confirms the

diagnosis of intestinal lipomas.<sup>7</sup>

## 2. Case Report

A 20 year male presented with history of pain in abdomen for 15 days and no passage of stool from 4 days. The pain suddenly worsened and the patient was referred to emergency department of surgery. There was no history of fever. There was no previous history of any chronic abdominal disease. There was no family history of gastrointestinal neoplasms. On examination, there was moderate distension of the abdomen with everted umbilicus that on palpation showed mild guarding and rigidity. Plain abdominal X-ray was done which revealed dilated loop of small bowel without free air under diaphragm. After evaluation, patient was subjected to computed tomography scan of abdomen which revealed a long segment (>10 cm.) of ileum entering into the distal ileum with dilatation of proximal intestinal loop and collapsed distal colon. Liver,

\* Corresponding author.

E-mail address: [drlalitpal@gmail.com](mailto:drlalitpal@gmail.com) (L. Kumar).

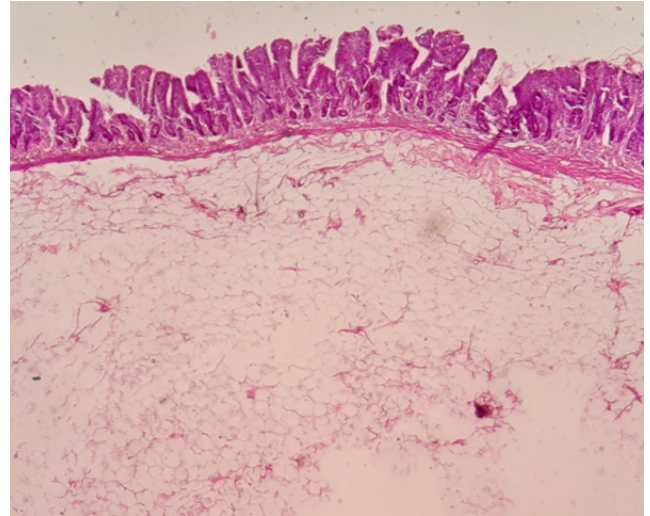
gall bladder, pancreas, spleen, both kidney, both adrenal glands, and pelvic organs appeared normal in size, shape and configuration. These findings lead to the possible diagnosis of ileoileal intussusception. Patient was planned for surgery and exploratory laparotomy with reduction of intussusceptum from intussusciens by milking of intussusceptum and resection of ileum 5 cm on both sides was done. A growth was seen in ileal intussusceptum area within 5cm margin and send for histopathological examination to the department of pathology. On gross examination of the resected piece of bowel, two irregular polypoid masses were seen on mucosal surface [Figure 1]. Larger mass is measuring 4.5x2.3x2.1 cm. and smaller measuring 3x2.5x2.0 cm. On cutting, polypoidal masses appeared yellowish in colour [Figure 2]. Microscopic examination of multiple sections from bowel showed normal intestinal histology and sections from polypoidal masses revealed expansion of submucosa by mature adipose tissue [Figure 3]. Histopathology report of ileal lipoma was given.



**Fig. 1:** Showing resected piece of bowel with two polypoid masses.



**Fig. 2:** Showing cut surface of polypoid mass which is yellowish in colour.



**Fig. 3:** Showing well circumscribed tumour area in the submucosa consisting of mature adipocytes [H&E ,4X].

### 3. Discussion

Gastrointestinal tract Lipomas are mesenchymal and arise from adipose tissue in the bowel wall. In 90% of cases, they are localized in submucosa and occasionally extend upto muscularis propria, while 10% are subserosal in location.<sup>8</sup> Submucosal lipomas of the small intestine are rare, and very rarely invade the muscle layer.<sup>7</sup> Histopathologically, lipomas are submucosal deposition of adipose tissue in the bowel wall and are pedunculated, sessile, and very rarely annular in position.<sup>3</sup> The incidence of intestinal lipomas varies between 0.15% and 4.4%. Intestinal lipomas occur in older persons, with slightly female predominance.<sup>2,9</sup> The peak incidence was reported in fifth to sixth decades of life.<sup>3</sup> However, we are reporting a case in young male. The colon is most common site, followed by the small bowel and stomach.<sup>10</sup> 70% of lipomas are located on the right side of the colon and 20 – 25% case presented in the small intestine, with ileum as the most common location followed by the jejunum.<sup>3,11</sup> The etiology of lipomatosis not yet established and some factors include embryogenic displacement of adipose tissue, degenerative disease with disturbance of fat metabolism, post chemotherapy fat deposition and chronic irritation.<sup>12</sup> Mostly lipomas are asymptomatic and found incidentally during colonoscopy, radiological examination, surgery or autopsy.<sup>10</sup> The symptoms are related to the size, location, and mobility of the lipoma.<sup>3</sup> Lipomas (>2 cm) are more likely to cause symptoms of abdominal pain, obstruction, bleeding or intussusception so they may be mistaken as malignancy.<sup>9</sup> Our case presented with intussusception. Preoperative diagnosis of lipomas can be made by imaging or endoscopic modalities. Computed tomography (CT) scans of the abdomen may reveal a mass of uniform fatty tissue density consistent with a lipoma.<sup>11</sup>

Surgical resection is recommended in symptomatic patients to relieve the symptoms and to exclude malignancy.<sup>2,9</sup>

#### 4. Conclusion

Symptomatic lipomas are a rare entity and that too in young male. When diagnosed histopathologically, they are benign tumours with no risk of recurrence. So they should always be kept in the differential diagnosis of sessile polypoid lesions. Surgery is usually curative.

#### 5. Source of funding

None.

#### 6. Conflict of interest

None.

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#### Author biography

**Pooja Agarwal** Professor

**Lalit Kumar** Junior Resident

**Nupur Kaushik** Junior Resident

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