

## Case Report

# A rare case of colonic lipoma causing colo-colonic intussusception

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### ABSTRACT

Gastrointestinal tract (GIT) lipomas are rare, benign mesenchymal neoplasm affecting all segments of the GIT and colon is affected most frequently. Reported incidence of colonic lipomas varies from 0.2% to 4.4%. Adult intussusception represents 1% of all bowel obstructions and 5% of all bowel intussusceptions. Gastrointestinal lipomas are rare benign tumors and intussusception due to a gastrointestinal lipoma constitute an infrequent clinical entity. Although intussusception is a common disease in children, intussusception caused by colonic lipoma in adults is a rare condition, and is usually caused by a large pedunculated lipoma. The majority are asymptomatic but may cause abdominal pain, obstruction or bleeding. The treatment for symptomatic or large lipomas is surgical excision. We would like to report a unique case of an elderly lady with colonic lipoma causing colo-colonic intussusception. After thorough investigations, exploratory laparotomy with colo-colonic anastomosis was done.

**Keywords:** Colonic lipoma, Intussusception, Exploratory laparotomy, Colonic anastomosis

### INTRODUCTION

Gastrointestinal tract (GIT) lipomas are rare, benign mesenchymal neoplasm affecting all segments of the GIT and colon is affected most frequently.<sup>1</sup> These tumors usually occur at older age in the sixth decade and more often remain asymptomatic.<sup>1</sup> Reported incidence of colonic lipomas varies from 0.2% to 4.4%.<sup>2</sup> In the colon, the most preferred site for lipoma is ascending colon, followed by descending colon, transverse colon, and rectum.<sup>3</sup> Adult intussusception represents 1% of all bowel obstructions and 5% of all bowel intussusceptions.<sup>4,5</sup> Gastrointestinal lipomas are rare benign tumors and intussusception due to a gastrointestinal lipoma constitute an infrequent clinical entity.<sup>5</sup> Although intussusception is a common disease in children, intussusception caused by colonic lipoma in adults is a rare condition, and is usually caused by a large pedunculated lipoma.<sup>6</sup> They are more common in women with a peak incidence between 50 and 60 years old.<sup>7,8</sup> Lipomas of the large intestine represent the

third most common benign tumors after hyperplastic and adenomatous polyps.<sup>9</sup>

These tumors are believed to arise from the connective tissue of the wall of the intestine.<sup>9</sup> They may be of a submucosal, subserosal, and intramural type. Among these, submucosal type is the most common. Lipomas of the large intestine are most commonly seen (in order of decreasing frequency) in the cecum, ascending colon, and sigmoid colon, more than 70% of these tumors are located in the right hemicolon. Intestinal obstruction is a rare presenting feature of colonic lipoma.<sup>2</sup> Only 25% of patients with colonic lipoma develop symptoms, including bowel obstruction and intussusception.<sup>10</sup>

### CASE REPORT

A 60 year old female presented with pain abdomen, intermittent colicky type of pain since past 2 months, aggravated since last 1 week associated with vomiting, diarrhea and passage of mucous in stools. No history of

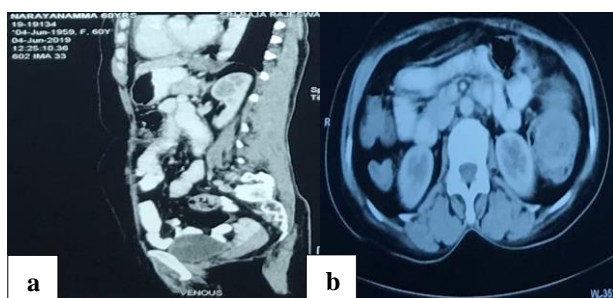
fever, abdominal distention, altered bowel habits, melena or loss of weight.

On initial examination all her vitals were stable. Per abdomen examination revealed diffuse tenderness over the abdomen. No guarding and rigidity. On auscultation – hyper peristaltic bowel sounds were present.

Investigation were all within normal limits and per rectal examination was normal.

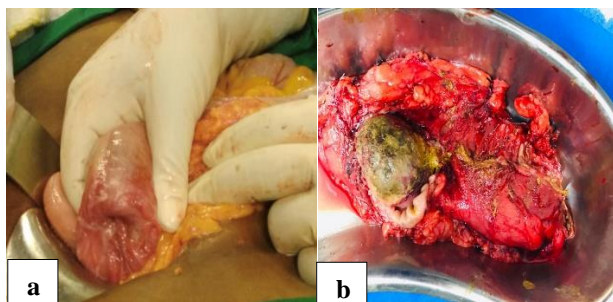
### Imaging findings

Ultrasound abdomen revealed hyper-echoic lesion approximately measuring 5×4×8 cm in the descending colon with wall thickening. Contrast enhanced computed tomography (CECT) abdomen and pelvis showed colo-colonic intussusception (distal transverse colon telescoping into proximal descending colon) secondary to distal transverse colon lipoma acting as a lead point.

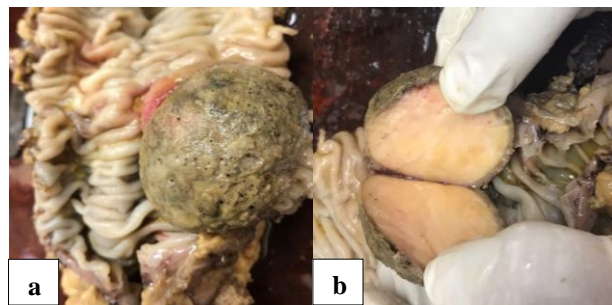


**Figure 1: CECT abdomen arrows showing (a) lipoma in the transverse colon), and (b) colo-colonic intussusception.**

Exploratory laparotomy was performed. Intussusception reduced, a solid mass of size 4×3 cm was identified intraluminally in the distal transverse colon after mobilising descending colon. Mass with 5 cm margin was resected and colo-colonic anastomosis was performed. The patient was followed up 6 monthly with ultrasound scans and is asymptomatic with nil recurrence.



**Figure 2: (a) Intra op finding-colo-colonic intussusception, and (b) colonic lipoma present in the distal transverse colon.**



**Figure 3: (a) and (b) Showing cut surface of the colonic mass.**

### DISCUSSION

Lipoma of the GIT is uncommon, and among cases reported, colon is the most common site. Although rare, they are the most common benign mesenchymal neoplasm of the GIT and next in frequency after adenoma.

In the colon, the most preferred site is ascending colon, followed by descending colon, transverse colon and rectum.<sup>3</sup>

Clinically symptomatic colonic lipomas account for 6% only, and symptoms are determined by the size and location of the mass.<sup>1</sup>

Four patterns of intestinal intussusception have been recognized: enteric, ileocecal, ileocolic, and colocolonic.

Colonic lipomas is usually small and asymptomatic, therefore most of the lipomas are detected incidentally during imaging modalities, colonoscopy surgery or autopsy. Several cases have been reported, where it led to intussusception, massive haemorrhage, prolapse, or perforation.<sup>10</sup> In adults, lead points for intussusception include, but are not limited to, benign and malignant tumors, Meckel’s diverticula, foreign bodies and adhesions.

The clinical presentation of intussusception can be very diverse in the adult. Abdominal pain is the most common symptom followed by obstruction and palpable mass. Common symptoms are abdominal pain, vomiting, and bloody stools presenting for many days to week.

Grossly, these tumors are usually solitary and may appear rounded, sessile, or pedunculated, multilobulated, soft, and yellowish.<sup>3,11</sup> Larger lipomas may undergo surface ulceration with bleeding.<sup>12</sup>

Colonic lipomas themselves are rare in the general population and occurred in only 0.2% of a large autopsy series of 60,000 cases reported in 1955.<sup>13</sup>

Recent reports in the literature have suggested that abdominal CT scanning is the preferred radiologic

modality for diagnosing intussusception from colonic lipomas.<sup>14</sup>

Barium-enema studies are not diagnostic for lipoma, but for intussusception is a good means.<sup>15</sup>

Colonoscopic biopsy confirms the nature, but inadequate tissue samples often indicate non-specific colitis with mucosal inflammation.<sup>16</sup>

Many therapeutic interventions have been tried for the treatment of colonic lipoma, which vary from hemicolectomy to segmental resection and local excision, according to the correct preoperative diagnosis and intraoperative findings.

Endoscopic resection can be performed when the tumor is smaller than 2.5 cm. The majority of authors recommend surgery as the standard method of treatment for every colonic lipoma greater than 2 cm in size.<sup>7,17</sup>

Surgical resection is the treatment of choice when giant lipomas are complicated by intussusception or bowel obstruction.

Surgical resection should also be the first-line management for lipomas that are sessile, have limited peduncles, or have extension of serosa/muscularis propria into the pedicle.

## CONCLUSION

Gastrointestinal lipomas are a rare entity, with colonic lipomas constituting only 0.2-4.4% of these. The colonic lipomas causing intussusception are even rarer, and here we present a unique and rare case of a colonic lipoma causing intussusception in a female patient which needed surgical intervention. Although rare, these diagnosis should be kept in mind while approaching patient with acute abdomen which will help in fast diagnosis and prompt intervention.

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