

Giant Submucosal Lipoma of Colon Causing Intussusception in an Adult

Dear Editor,

Lipoma of the large intestine is rare with an incidence of 0.2%–4.4%.^[1] Intussusception is rare in adults with an incidence of 2–3 per million per year.^[2] Colonic intussusception caused by lipoma is even rarer. Only 37 definite cases have been reported in the English language literature over the past 45 years.^[3] Abdominal computed tomography (CT) is the investigation of choice for abdominal lipoma, with 71.4%–87.5% sensitivity and around 100% specificity.^[1,3] The definitive diagnosis for lipoma is made after histopathological evaluation (HPE). Capsule endoscopy and digital balloon endoscopy are newer modalities for diagnosing gastrointestinal lipoma, particularly in the small bowel.^[4] Colonoscopic features include smooth surface, “cushion sign” or “pillow sign” (depression or pillowing of mass on exerting pressure with biopsy forceps), “naked fat sign” (extrusion of fat from biopsy site), and “tenting sign” (easy to elevate mucosa with biopsy forceps over lipomatous mass).^[5,6]

A 35-year-old male presented to the surgery department with complaints of pain abdomen for 4 days and vomiting and obstipation for 2 days. Abdominal ultrasound showed dilated bowel loops and multiple air-fluid levels. Abdominal CT scan was suggestive of colocolic intussusception with lipoma of the transverse colon. The patient underwent surgical exploration. Intraoperatively, a 5-cm segment of proximal transverse colon was found telescoping into distal segment. A large polypoidal mass (4 cm × 4 cm) was found at the lead point. No ascites and no liver, peritoneal, or mesenteric deposits were seen. Excised formalin-fixed specimen was sent for HPE for confirmation of diagnosis. Grossly, a large bowel segment measuring 10.5 cm was seen with unremarkable outer surface. On cut-section, an intraluminal pedunculated polypoidal soft tissue mass was identified, measuring 4.5 cm × 4 cm × 4 cm [Figure 1a]. Mucosa appeared edematous. On cut-section of the mass, it was well-circumscribed yellow, not infiltrating through the peduncle [Figure 1b], suggesting lipomatous polyp.

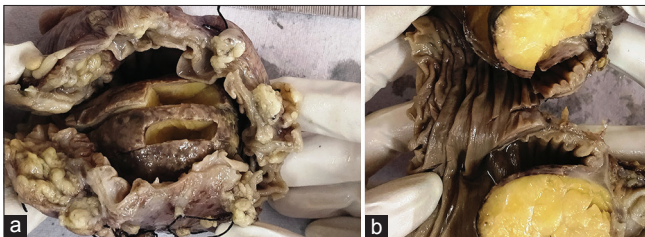


Figure 1: (a) Large bowel segment measuring 10.5 cm with unremarkable outer surface and an intraluminal pedunculated polypoidal soft tissue mass, measuring 4.5 cm × 4 cm × 4 cm. Mucosa appeared edematous. (b) On cut-section of the mass, it was well-circumscribed yellow, not infiltrating through the peduncle, suggesting lipomatous polyp

Hematoxylin and eosin-stained sections from growth showed mature adipocytes having eccentric nucleus and clear cytoplasm, limited to submucosa [Figure 2a and c]. It was not extending to muscularis propria. No lipoblasts were seen. The overlying epithelium showed focal surface ulceration with submucosal edema, congestion, and vascular proliferation [Figure 2b]. A final diagnosis of giant submucosal lipomatous polyp with colocolic intussusception was made.

Lipoma is the second most common benign tumor of large intestine after adenomas.^[2] It is most common in the ascending colon (61%), followed by descending colon (20.1%), transverse colon (15.5%), and rectum (3.4%).^[1] Most of them (90%) are submucosal which can occasionally extend into muscularis propria, and 10% are subserosal.^[3] They are mostly asymptomatic; however, giant lipoma can present with acute abdomen. Giant lipoma of the transverse colon causing intussusception in the adult is rare as seen in the present case. Adult intussusception necessitates surgical intervention (open or laparoscopic) due to high incidence of malignancy (60%–65%) and also to relieve symptoms.^[7] Lipomectomy and limited resection of the involved segment are considered adequate treatment for preoperatively diagnosed colonic lipoma.^[3] A preoperative CT scan can suggest the rare possibility of colonic lipoma and help avoid an extensive resection.

Consent

Informed consent was taken from the patient for publication of case details and photographs.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given his consent for his images and other clinical information to be reported in the journal. The patient understands that his name and initials will not be published and due efforts will be made to conceal identity, but anonymity cannot be guaranteed.

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Nil.

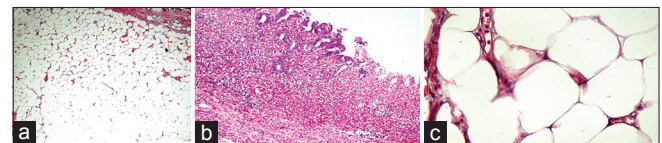


Figure 2: (a) H and E-stained sections from growth showed mature adipocytes, limited to submucosa. It was not extending to muscularis propria. No lipoblasts were seen. (b) Overlying epithelium showed focal surface ulceration with submucosal edema and congestion. (c) Mature adipocytes having eccentric nucleus and clear cytoplasm

Conflicts of interest

There are no conflicts of interest.

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