Archives of Surgical Research | Case Report

Lipoma of Colon Presenting with Intestinal Obstruction: A Rare Entity

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IMPORTANCE Lipomas are the most common benign tumors affecting soft tissues of the human body. Lipomas of GIT are, however, rare. When present, they are usually at the level of submucosa and only rarely involve the muscle layer or serosa. Most of the submucosal lipomas of GIT are present in the colon (65-75%), only 25% in the small intestine and occasionally in the stomach or jejunum. These lesions are usually asymptomatic and are found incidentally on autopsies. In cases when they do become symptomatic, it is when they get ulcerated. Hence, are consequently only detected when they cause intussusception and obstructive symptoms. The present case report is of a 50-year-old female who came with sudden onset of severe lower abdominal pain. She was diagnosed with possible submucosal lipoma of ascending colon with the intraluminal extension and an associated intussusception on CT abdomen with contrast. She was operated and a histopathological examination confirmed the diagnosis.

KEY WORDS: lipoma; colon; acute abdomen; intussusception; volvulus; hemicolectomy

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Case Report

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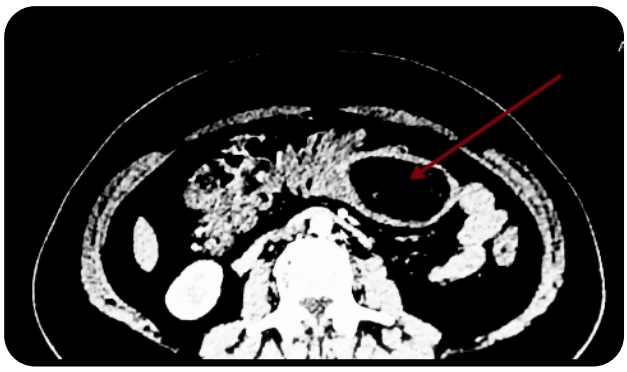
Lipomas of the gastrointestinal tract are rare and symptomatic variants even rarer.[1] They can occur at any age but most commonly present between ages 50 to 60 years in adults; while also being scarce in children. Lipomas only become symptomatic when their advancement causes occurrences like intussusception, which lead to symptoms of obstruction like pain.[1] Imaging modalities such as CT scan or MRI are usually used to confirm the diagnosis of intestinal lipoma. Of the lipomas that do occur in GIT, common site is in the large intestine but infrequently the small intestine and the stomach are also involved. They are usually single but can be multiple in number involving both large and small intestines causing multiple areas of volvulus or intussusceptions.[1]

CASE REPORT:

A 50 years old female presented to the Surgical Outpatient Department of Shalamar Hospital on 12th of December 2020 with the complain of lower abdominal pain which was sudden in onset, of severe intensity, and with no history of fever, nausea, vomiting, or constipation. On examination, there was fullness in the epigastrium and right hypochondrium. However, no definite mass was palpable. There was no abdominal distention, guarding or rigidity; only mild tenderness in right hypochondrium was positive. Ultrasound abdomen was advised followed by CT abdomen with contrast before admission and routine workup for surgery was done after admission which included complete blood count (CBC including hematocrit), Serum electrolyte (Na+, K+, Ca+2, Mg+2, Phosphorus), Blood sugar random, creatinine and Viral markers for Hepatitis B and C were advised. All hematological investigations were within a normal range.

Ultrasound abdomen showed an indeterminate, well defined, rounded, echogenic SOL (65*40mm) in the left lumbar region, deep to subcutaneous planes; anterior to psoas muscle. Mass was showing minimal flow on doppler ultrasonography.

CT scan abdomen with contrast showed a large polypoidal fat-containing lesion (lipoma) noted to involve the ascending colon arising from the submucosa with an intraluminal extension having a large pedunculated fatty component in the distal transverse colon measuring 51×36mm. This led to intussusception of a part of the ascending and the proximal transverse colon into the distal transverse colon with traction changes.



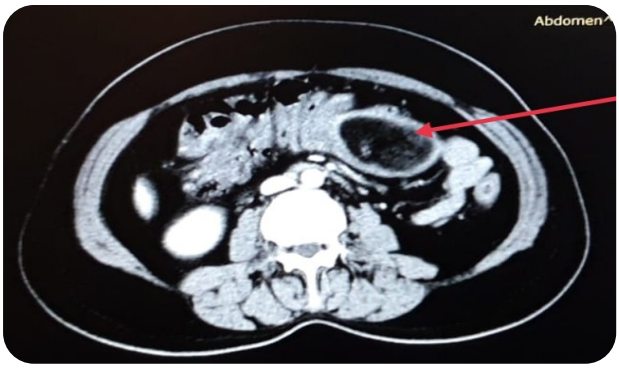


Fig 1: Triphasic CT Scan Abdomen (Arterial and Venous Phases)

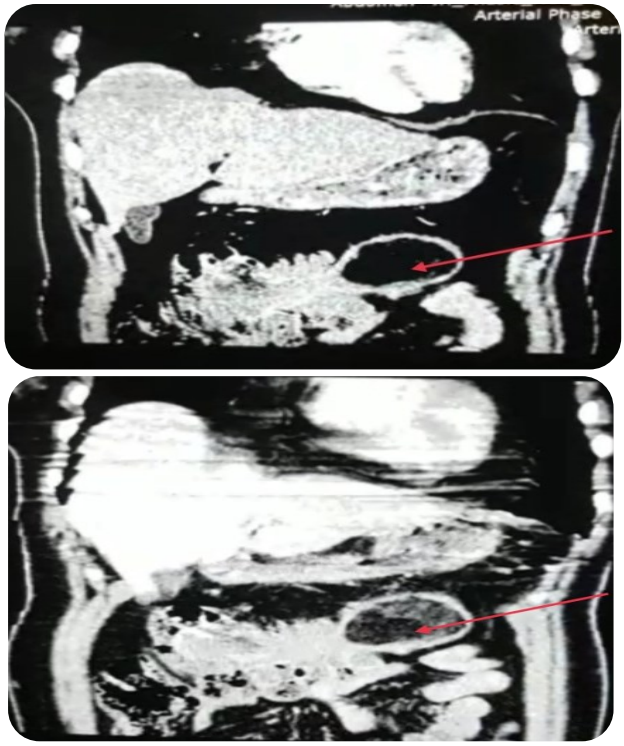


Fig 2: Triphasic CT Scan Abdomen (Arterial and Venous Phases)

She was admitted on the 16th of December 2020 and after bowel preparation was put on the list for surgical procedures of the next day, for the Right Hemicolectomy.

Operatively, there was a large mass in the hepatic flexure of the colon which was mobile and firm in consistency. Serosa was not involved. There was no associated regional lymphadenopathy, no liver metastasis, and no ascites. The rest of the GIT was found to be normal. Standard Right Hemi Colectomy was performed and a surgical specimen consisting of a segment of ascending colon with an externally palpable large polypoidal mass attached with a stalk to the cecal wall along hemicolectomyum, an appendix with attached mesoappendix and cecum was sent for histopathology. Postoperatively, the patient was kept in the High Dependency Unit for 24 hours and later in the ward. She passed flatus and stool on the fourth post-op day and oral liquids were started on the fifth post-op day. The patient was discharged and on the follow up she was vitally stable. The wound was healthy; stitches were removed on the tenth post-op day.

The result of the tissue biopsy showed lipoma, composed of mature adipose tissue, and revealed areas of infarction and fibrous strands. The final diagnosis of Submucosal polypoid lipoma (7.8cm) with surface ulceration located in the ascending colon and projecting into the ileum was made. The rest of the examination was unremarkable.

DISCUSSION:

Colonic lipomas are rare, benign, non-epithelial tumors of mesenchymal origin. They are often solitary lesions originating from submucosal found in the proximal colon. They typically measure less than 2cm.[2] They are composed of mature adipose tissue, are located in large intestines; more specifically colon.[1] They are usually asymptomatic and are consequently found as an incidental finding on autopsies[1]. Giant colonic lipomas greater than 4 cm present with non-specific obstructive gastrointestinal symptoms such as abdominal pain, abdominal distention, constipation, or gastrointestinal bleeding.[2] They become symptomatic when they lead to obstruction due to intussusceptions[1] and/or ulcerate. The incidence of colonic lipoma is 65-75%.

Alaaddin et al[3] described a case of a 30-year-old woman who presented with complains of worsening abdominal pain both in the upper and lower quadrants. She was diagnosed with giant colonic lipoma causing intussusception. Cartelle et al[2] reported a case of giant colonic lipoma presenting as intermittent colonic obstruction with hematochezia. J Surg[4] reports a case of a 56-year-old female who presented with a large lipoma of the ascending colon. Kikuchi et al[5] presented a case of a 43-year-old man who was diagnosed with intussusception secondary to the descending colon lipoma. The patient had presented with acute appendicitis simultaneously occurring as his primary complain. Ghanam et al[6] presented a case of a 61-year-old male. He experienced abdominal pains and rectal prolapse. He was diagnosed with pedunculated colonic lipoma prolapsing through the anus. Feo et al[7] presented a case of a 50-year-old man with chronic abdominal pain due to colo-colic intussusception secondary to lipoma of the left colon. Rabbet et al[8] presented a case of colo-colonic intussusception secondary to a sigmoidal lipoma, in a 40-year-old man. Chehade et al[9] presented a case of an adult female presenting to a hospital setting with hematochezia and right lower quadrant pain. She was diagnosed with a large ileocecal submucosal lipoma through CT abdomen and colonoscopy. Hu CC et al[10] presented a case of a 50 year old man who had abdominal pain and lower GI bleed diagnosed. He was subsequently diagnosed with Giant colonic lipoma arising from the ileocecal valve and causing cecal-transverse colonic intussusception.

CONCLUSION:

Although lipomas of GIT are rare, in cases of their occurrence when they show symptoms of intestinal obstruction, they usually arise from colon. As discussed above, many cases of intestinal obstruction have been reported due to underlying lipomas. Hence, they should be considered as part of differential diagnosis made when acute abdomen presents due to intussusception or intestinal obstruction. C.T scan and MRI are the mainstays for the diagnosis of this disease. Other investigations such as barium enema and colonoscopy are also used as diagnostic tools. In the case we presented, ultrasound abdomen and C.T scan were the main investigations. As the patient presented with acute pain and suspicion of intussusception was cleared on CT scan abdomen, colonoscopy was not performed.

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Declaration of Consent:
The authors certify that they have obtained all appropriate consent required from the patient. The patient understands that their name and initials will not be published and due efforts will be made to conceal her identity but complete anonymity cannot be guaranteed.

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