



Giant Colonic Lipoma causing Intussusception: A rare case report

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GJMEDPH 2013; Vol. 2, issue 5

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Conflict of Interest—none

Funding—none

ABSTRACT

Colonic lipomas are uncommon nonepithelial neoplasms that are usually asymptomatic and incidentally found during endoscopy, surgery or autopsy. The reported incidence of colonic lipomas ranges from 0.2% to 4.4%. We report a rare case of a 64-year-old male patient with symptomatic giant colonic lipoma causing intermittent colo-colonic intussusception. The patient underwent surgery, and histopathological examination of the specimen confirmed the diagnosis of giant colonic submucosal lipoma.

Keywords: Colonic lipoma; intussusception; histopathology

INTRODUCTION

Gastrointestinal lipomas are rare nonepithelial neoplasms that can be found anywhere along the entire length of gastrointestinal tract. Lipoma of the large intestine is rare, with a reported incidence ranging between 0.2% and 4.4%.¹ Colonic lipoma typically presents as a sessile polypoid mass, arising from the submucosa with an intact mucosa. They usually involve right colon and are mainly asymptomatic.² Infrequently, lipomas of the colon are pedunculated and may develop superficial ulceration and bleeding and become symptomatic.² Giant colonic lipomas (>4 cm) may cause complications such as intussusceptions or bowel obstruction and may thus mimic malignancy at presentation.³

We present a case of giant colonic lipoma causing colo-colonic intussusception. Histopathological examination confirmed the diagnosis.

CASE DETAILS

Case History

A 64 year-old male patient presented as an emergency with intermittent pain in the central abdomen and clinical findings of subacute intestinal

obstruction. Routine blood tests were within normal range. CT scan showed an ascending colo-colonic intussusceptions. Clinically, differential diagnoses were gastrointestinal stromal tumor (GIST), lymphoma or lipoma.

A right hemicolectomy was performed. Macroscopic assessment of the resected specimen showed the presence of a round sessile, polypoid mass in caecum measuring 4.5x4x3cm in size with the ulcerated overlying mucosa causing intussusception of the cecum into the ascending colon. On cut surface, it was soft, yellowish and greasy. (**Figures 1 and 2**).

Mesocolic tissue with reactive lymph nodes was also obtained.

Histopathology

Microscopical examination revealed a tumor mass in submucosa, composed of lobules of mature adipocytes. The overlying colonic mucosa showed focal ulceration and necrosis. Histopathological examination confirmed the diagnosis of a submucosal ceecal lipoma. (**Figures 3 and 4**).



Figure 1 Macroscopy: Macroscopic picture of the resected specimen showed the presence of a round colonic polypoid tumor with ulcerated overlying mucosa. (Shown by arrow)



Figure 2 Macroscopy: Cut surface showed a lobulated, yellowish encapsulated submucosal tumor with focal necrosis. (Shown by arrow)

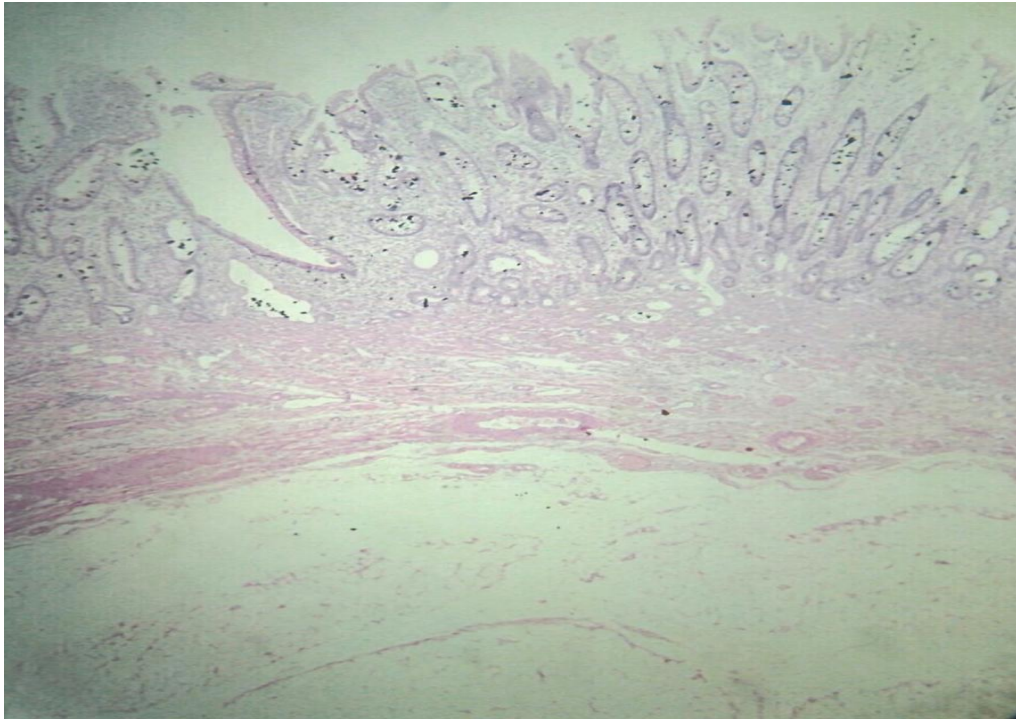


Figure 3 Histopathology: *Scanner view- Histopathological examination showed ulcerated colonic mucosa and a mass in submucosa, composed of lobules of mature adipocytes. Hematoxylin and eosin stain (10X)*

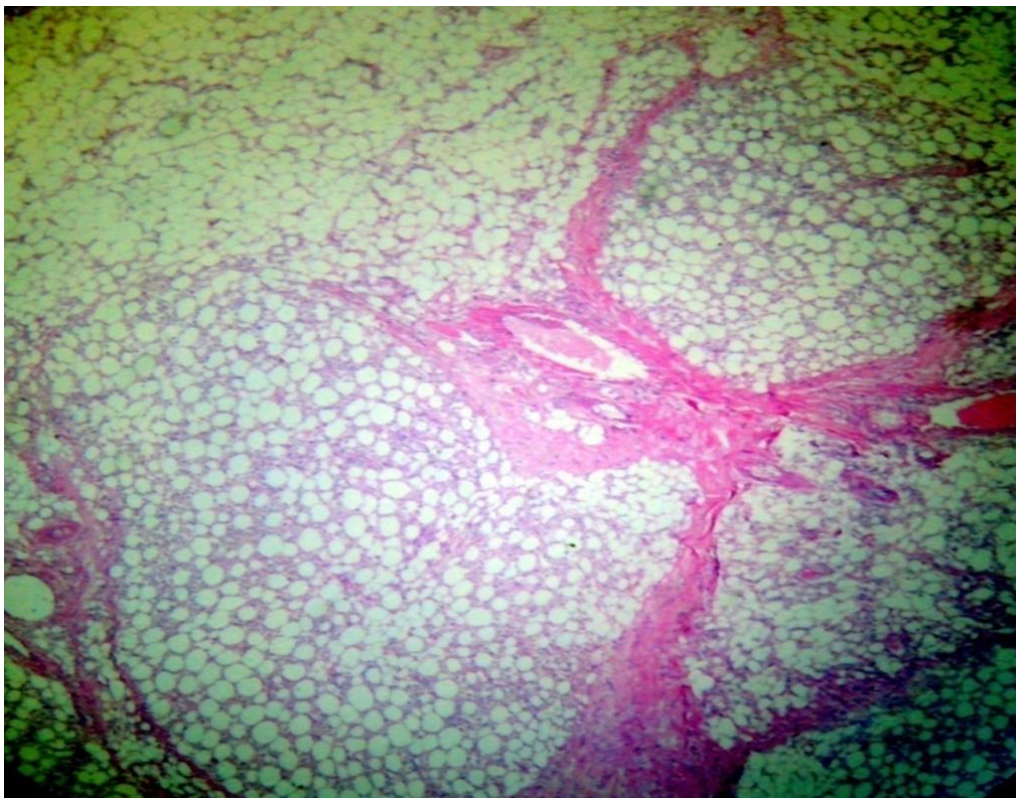
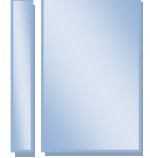


Figure 4 Histopathology: *High power view - Colonic lipoma composed of lobules of mature adipocytes. Hematoxylin and eosin stain, High power view (40X).*



DISCUSSION

Colonic lipomas are rare neoplasms with an incidence ranging from 0.2% to 4.4% in relation to all polypoid lesions of large intestine.⁽¹⁾ They were first described by Baurer in 1757.⁴ Lipomas in the intestinal tract are still relatively rare, however, being present in only 0.2% of a large autopsy series of 60,000 cases reported in 1955.⁴ Recently, Paškauskas et al. reviewed and has found less than 50 cases of colonic lipomas causing intussusceptions published in the English-language.²

Lipomas occur throughout the intestinal tract, from the hypopharynx to the rectum, with the highest incidence in the colon, where lipoma is the commonest benign neoplasm after adenomas.² The commonest site for large bowel lipoma (in order of decreasing frequency) is the cecum, ascending colon, and sigmoid colon.⁵ The peak incidence for lipoma of the large bowel is in fifth-sixth decade.²

Colonic lipomas are generally silent.² These tumors are usually detected incidentally during a colonoscopy or surgery done for other conditions. Occasionally patients may present with intermittent abdominal pain, rectal bleeding, diarrhoea and obstruction.^{2,3} Size of the lipoma is a predictor of symptomatology. Giant lipomas may undergo intermittent torsion, ischemia and very rarely cause intussusception as in our case.⁵ In adults, it has been reported that two-thirds of colonic intussusceptions result from primary adenocarcinoma.⁶

About 90% of colon lipomas originate from submucosa and the remaining are subserosa or intermucoserosal.² These lesions are encapsulated and are sessile.² Infrequently, lipomas of the colon

are pedunculated, with ulcerated or necrotic overlying mucosa.⁵ Thus, an accurate preoperative diagnosis is difficult and lipoma is often mistaken for adenomatous polyp, diverticulosis or carcinoma.⁴ Symptomatic colonic lipomas, are difficult to diagnose from other malignant and benign colonic neoplasms, as both occur in similar age groups and may have similar symptoms.² Endoscopy and imaging modalities such as barium enema and CT can contribute to the preoperative diagnosis of colonic lipomas. However, occasionally colon lipomas might have atypical CT presentation, especially when intussuscepted, due to varying degrees of infarction or fat necrosis.⁵ Even experienced endoscopists may mistake a large colonic lipoma for a large polyp or colorectal cancer.⁵

Histopathologic analysis is required for definitive diagnosis in such settings and is attained after surgical or endoscopic resection of the tumor.

CONCLUSION

Colonic lipomas, although unusual, may mimic polyps or tumors and cause a variety of symptoms warranting surgery. Thus, they present difficulties in the preoperative differentiation between malignant and benign colonic neoplasm. Hence it is important to know the varied presentations of these tumours because they can be mistaken for a malignant lesion. Histopathological examination provides definitive diagnosis in cases of colonic lipomas.

ACKNOWLEDGEMENT

We are grateful to Dr. Meenakshi Mathur, Dean, ESI PGIMSR, Andheri (E), Mumbai, for her encouragement and support.

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