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Huge symptomatic Lipoma of the decending colon: A case roport

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Abstract
The colon is the most common site of gastrointestinal lipomas. Colonic lipoma is the second most common benign colonic tumor, next to adenoma in prevalence. The majorities of lipomas are asymptomatic and are often incidental findings. Lipoma of the decending colon is rare and could pose a diagnostic dilemma. We present a case of huge symptomatic lipoma of the decending colon mimicking subacute appendicitis. CT abdomen is an indispensable tool for diagnosis and familiarity with CT imaging findings may be helpful in making an accurate diagnosis.

Keywords: Colon, Computed Tomography (CT), Lipoma

Introduction
Gastrointestinal tract (GIT) lipomas are very uncommon and can be seen anywhere along the entire length of the GIT from the hypopharynx to the rectum. They are the second most common benign lesion in the colon but are far less common than adenomatous polyps. The incidence of colonic lipomas as documented ranges from 0.2% to 4.4% [1] and are most commonly seen between the ages of 50 and 70 years [2]. About 90% of colonic lipomas are situated in the submucosa; the remainder of these tumors are subserosal or intramucosal in origin and can be sessile or pendunculated [3]. Lipomas of the large intestine are predominately in the cecum, followed by ascending colon and then sigmoid colon. Seventy percent of these tumors are situated in the right hemicolon. Colonic lipomas are more common in female than in male, with a predilection for the right colon in female and the left colon in male.[3] They are most often solitary, but multiple lesions are reported in 10% to 25% of cases [1, 4].
The greater numbers of lipomas are asymptomatic and are often incidental findings with only 25% of patients manifest with symptoms.[1,4] The occurrence of symptoms appears to be associated with the size of lipoma and those greater than 2 cm may occasionally cause abdominal pain, changes of bowel habits, rectal bleeding and bowel obstruction, intussusception or prolapsed [5- 6].
Diagnosis can easily be made with cross-sectional imaging modalities such as Magnetic resonance imaging (MRI) and CT scan, taking cognizance of imaging characteristics of fat containing masses. Although, ultrasonography is cheap and readily available imaging modality, the diagnosis of GI tract lipomas is highly dependent on the operator's skill [7- 8].
In this report, we sought to raise awareness as to the possibility of colonic lipoma in cases of abdominal symptoms, as they are rare, commonly asymptomatic and often present diagnostic difficulties leading to inappropriate therapeutic regimen.

Case Report
A 48- year old man with a history of chronic lower abdominal pain was referred to a private diagnostic centre for abdominal CT which showed a fat density left lower abdominal mass.
Review of the past medical history revealed that the patient has been having abdominal pain for about two years. The pain was insidious in onset, intermittent and later became persistent with occasional exacerbation requiring Buscopan (Hyosine) Injection to control.
Consequently patient was diagnosed as having subacute appendicitis and subsequently had appendectomy without abatement of the pain. Abdominal ultrasound done on the patient identified an ill-defined mass with an aperistaltic loop of bowel related to it in the lower abdomen. It was based on this ultrasound finding that the patient was referred for abdominal CT.
Abdominal CT was done with rectal and intravenous contrast agents. The study revealed a lobulated filling defect in the left colon with well-circumscribed margins. The mass showed an internal matrix of mainly fatty density with Hounsfield Unit (HU) of -88HU and enhancing fine internal septae, measuring 7.52 x 3.92cm (Fig1.). No evidence of proximal obstruction. No associated fat stranding around the affected colon. The lesion represents a lipoma of the descending colon (Fig 2A, 2B and 2C).

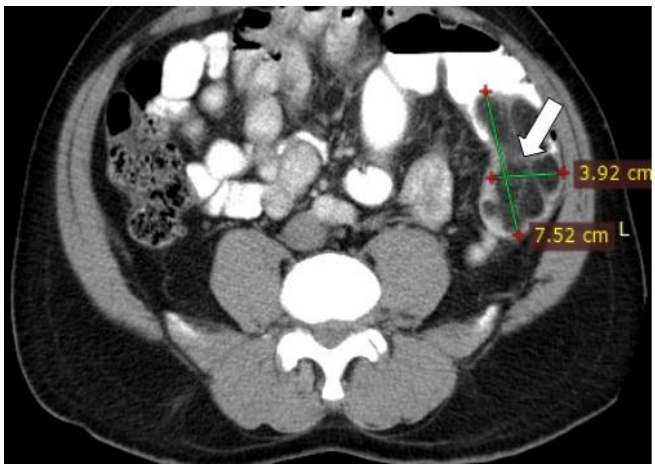

Fig 1: Axial CT image of the abdomen showing measurements of the colonic lipoma(Arrow).

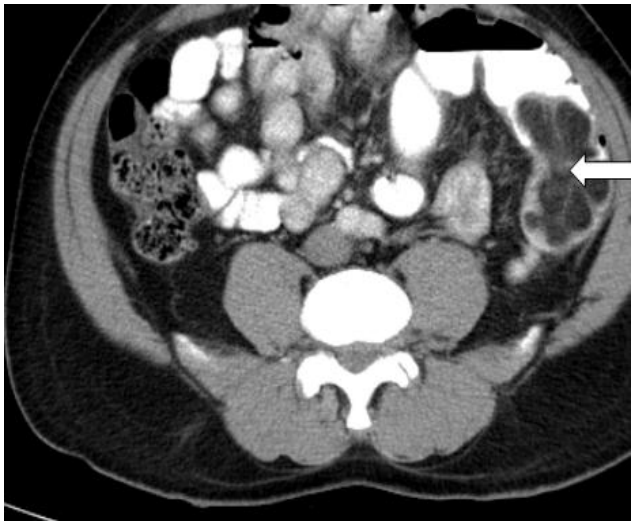

Fig 2A: Axial CT image of the abdomen showing left colonic lipoma(Arrow).

Fig 2B: Coronal CT image of the abdomen showing left colonic lipoma (Arrow).

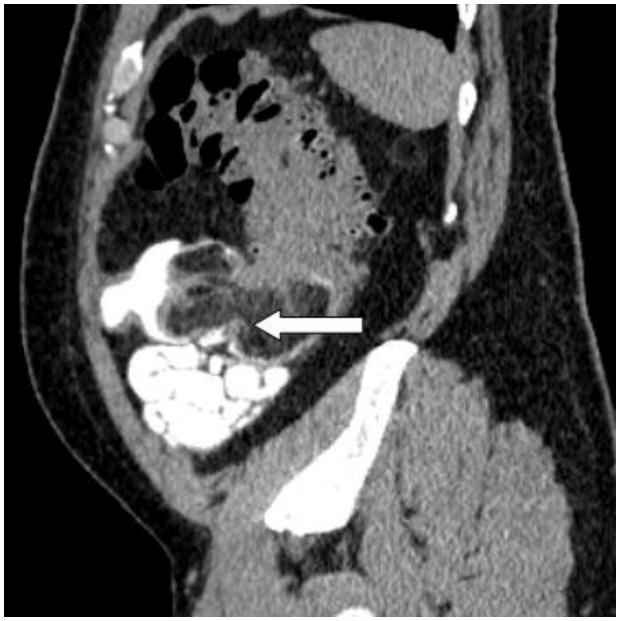

Fig 2C: Sagittal CT image of abdomen showing left colonic lipoma (Arrow).

Discussion

Lipomas are benign non-epithelial lesions of adipose tissues and can be found in virtually every organ system of the body including the GIT. The frequency of detection of lipoma in the GIT has increased due to widespread application of cross-sectional imaging modalities [9].

Gastrointestinal lipomas are found commonly in the colon and mostly asymptomatic, especially with a small size tumour. Lipomas greater than 2cm in diameter are likely to present with symptoms. Most noted symptoms depend on the size of the lipoma. Lipoma greater than 4cm in size become symptomatic in 75% of patients [6, 10]. Similarly, the lipoma in the case under review was relatively large, measuring 7.52 x 3.92cm in size and caused severe abdominal pain. The size of this lipoma is almost the size of the largest lipoma ever reported in the literature [11].

Colonic lipomas are relatively uncommon tumours and may be sessile or pedunculated, usually submucosal in location, and covered by normal mucosa. On cross-sectional imaging modalities such as CT and MRI, lipomas are usually easy to diagnose on account of their density (-80 – 130HU) and intensity following that of fat on all sequences respectively. Although, these features are prominent only in large lesions, as smaller tumors are not detectable as a result of artifacts and partial volume averaging [12]. This is in keeping with the study conducted by Panagiotis *et al* [13]. In their study, abdominal CT could not diagnosed lipoma and they ascribed it to the relative small size of the lipoma. In our case, the tumour was huge and it exhibited all the CT characteristics of a fatty lesion making diagnosis possible.

Magnetic resonance imaging (MRI) may be particularly useful in the detection of lipomas as the signal intensity is characteristic of adipose tissue on T1-weighted and fat-suppressing images [14, 15], however, is poorly patronized in our setting because of its relative high cost.

Abdominal ultrasound is indispensable for the diagnosis of abdominal pathologies but imaging characteristic may be nonspecific especially when it is performed by not too competent hands, probably this was the situation with the case under review. Devrim *et al* [9], in their study reported that although ultrasonography may be used as a highly accurate diagnostic imaging modality in some patients with colonic lipomas but because of its inherent limitations, CT remain an excellent imaging modality of choice for the diagnosis of colonic lipomas. Other imaging techniques such as Endoscopic ultrasound, CT colonography (Virtual colonoscopy), Conventional (optical) colonoscopy are potent methods for the diagnosis of colonic lipomas [16], however, are expensive, time consuming, require expertise and are not readily available in our settings.

Acknowledgement

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Conclusion

Colonic lipomas can be responsible for abdominal symptoms and should be considered in the differential diagnosis when accessing abdominal pathologies. CT abdomen is an indispensable imaging modality to be considered for diagnosis of abdominal pathologies especially when colonic lipoma is being assessed.

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