

## Caecal Lipoma: A Rare Cause of Abdominal Pain

Sara Essetti\*, Kaoutar Imrani, Chaymae Faraj, Nourrelhouda Bahlouli, Nabil Moatassim Billah and Itimad Nassar

Central Radiology Department, Ibn Sina University Hospital Center, Mohammed V University, Rabat, Morocco

**\*Corresponding Author:** Sara Essetti, Central Radiology Department, Ibn Sina University Hospital Center, Mohammed V University, Rabat, Morocco.

**Received:** April 08, 2024; **Published:** May 03, 2024

### Abstract

Colonic lipomas are rare benign tumors originating from nonepithelial tissue. They are commonly asymptomatic, often leading to their incidental discovery during endoscopic or CT examinations. However, if the lesion is large, it may cause symptoms, such as abdominal pain, bowel disorders, bowel obstruction and intussusception. We report a case of a 50-year-old female patient diagnosed with a 2,5 cm caecal lipoma in abdominal CT which was performed to investigate a chronic right lower quadrant pain.

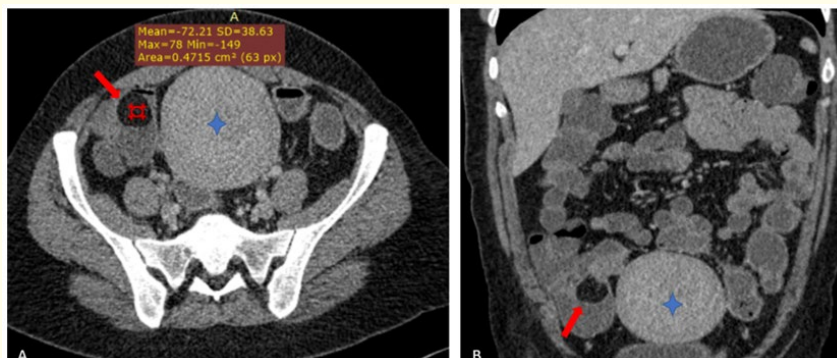
**Keywords:** Caecum; Lipoma; Tumor; CT

### Introduction

Colonic lipomas are uncommon gastrointestinal tract conditions [1], categorized as benign non-epithelial neoplasms. They present 4% of all benign tumors of the colon following adenoma [2]. The cecum is the most frequent location site, followed by the right colon and the sigmoid [3]. They tend to occur more frequently in older females and they are generally asymptomatic. Clinical symptoms such as abdominal pain, bowel disorders, bowel obstruction and intussusception are seen if the lesion is large. CT scan is considered the optimal imaging modality for assessing and confirming the presence of fatty tissue within a tumor, depicts lipoma as a low attenuating mass. The therapeutic approach typically involves either endoscopic or surgical resection, with the choice depending on factors such as tumor size, location, and the presence or absence of symptoms.

### Case Report

A 50-year-old female previously diagnosed with uterine leiomyoma and whose sister has been treated for colon cancer, presented with chronic right lower quadrant pain evolving in the context of afebrile condition and preservation of general state. Physical examination revealed a firm, 9 cm diameter mass above the pubic bone, attributed to her uterine leiomyoma, with no other abnormalities noted. Laboratory tests were unremarkable. An abdominal CT scan was performed revealed an intraluminal hypoattenuating mass (-72UH) with sharp outlines originating from the interior wall of the cecum near the ileocecal valve, measuring 2.6 x 2.5 cm, in addition to the uterine leiomyoma, which measured 10 x 9 cm (Figure 1). Based on these findings, a diagnosis of caecal lipoma was made. Surgical tumor resection was recommended, but the patient declined and opted for follow-up instead.



**Figure 1:** Axial (A) and coronal (B) CT images of the abdomen with intravenous contrast showing an intraluminal mass lesion (red arrow) in the cecum with homogeneous fat density (-72 UH), suggestive of caecal lipoma. Also, note a large uterine leiomyoma (asterisk).

## Discussion

Colonic lipomas are benign tumors originating from the intestinal wall's connective tissue [4]. They constitute 4% of all benign colon tumors [5] and 2.6% of non-malignant gastrointestinal tract tumors [6].

The etiology of colonic lipomas is currently unclear, it has been hypothesized that chronic intestinal irritation and inflammatory response, may contribute to their development [7].

The cecum is the most frequent location site, followed by the right colon and the sigmoid [3]. Colonic lipomas arise in the submucosa but occasionally extend into the muscularis propria or subserosa [8].

They are more commonly observed in women aged between the fifth and sixth decades of life [9]. In most cases, the tumor is asymptomatic and is often discovered incidentally during endoscopic or CT examinations. However, clinical manifestations such as right lower quadrant pain, diarrhea or constipation, and episodes of rectal bleeding due to ulceration of the overlying mucosa are observed when the mass exceeds 2cm in diameter [10]. Additionally, large colonic lipomas may be revealed by complications such as intussusception or intestinal obstruction.

Colonoscopy is the primary method for diagnosing colonic lipomas, which typically appear as smooth, rounded tumors with a wide base and a yellowish appearance. Two typical colonoscopic signs support the diagnosis: the cushion sign (depression when forceps are pressed against the lesion) and the naked fat sign (extrusion of yellowish fat at the biopsy site) [11].

Histologically, the lipoma displays a dense aggregation of enlarged and rounded fat cells, where both the cytoplasm and nucleus are located at the cell periphery [4].

A CT scan is considered the optimal imaging modality for assessing and confirming the diagnosis of colonic lipoma. It reveals a well-circumscribed intraluminal mass with fatty tissue densities without any solid component. However, the presence of a solid component within the mass should prompt consideration for a possible liposarcoma diagnosis, which is the primary concern in the differential diagnosis [12]. In cases of small colonic lipomas, the diagnostic value of CT is limited, and differential diagnosis may include benign polyps such as adenomas or malignant lesions such as adenocarcinomas.

Tumor resection is recommended for symptomatic lipomas, especially when there is obstruction or bleeding and if the mass exceeds 2.5 cm in size [13]. Generally, small colonic pedunculated lipomas < 2 cm in size can be removed endoscopically, surgical resection is recommended for larger lipomas > 2 cm [11].

### Conclusion

Colonic lipomas are rare benign tumor usually asymptomatic. Symptoms may arise depending on the size of the lipoma. The cecum is the most frequent location site. CT scan is considered the optimal imaging modality for confirming the diagnosis. Tumor resection is recommended for symptomatic or larger lipomas, and this can be done either endoscopically or surgically based on factors such as size, location, and associated complications.

### Informed Consent

Written informed consent was obtained from the patient for the publication of this case report.

### Ethical Approval

Our institution does not require ethical approval for reporting individual cases or case series.

### Author Contributions

All authors contributed significantly to the manuscript. All authors have read and approved the final manuscript.

### Bibliography

1. Crocetti D., *et al.* "Surgery for symptomatic colon lipoma: A systematic review of the literature". *Anticancer Research* 34 (2014): 6271-6276.
2. Bruneton JN and Schmutz G. "Lipoma. Imaging of Gastrointestinal Tract Tumors". Bruneton JN (ed): Springer Verlag, Berlin Heidelberg (1990): 38-46.
3. Taylor AJ., *et al.* "Gastrointestinal lipomas: A radiologic and pathologic review". *American Journal of Roentgenology* 155.6 (1990): 1205-1210.
4. LS Andrei., *et al.* "Rare cause of intestinal obstruction - submucous lipoma of the sigmoid colon". *Chirurgia (Bucur)* 109.1 (2014): 142-147.
5. Rajaonarison Ny., *et al.* "Lipomas of the digestive tract: general aspects and imaging". *Cureus* 6.9 (2014): e208.
6. A Aminian., *et al.* "Ileal intussusception secondary to both lipoma and angioliopoma: a case report". *Cases Journal* 2 (2009): 7099.
7. D Crocetti., *et al.* "Surgery for symptomatic colon lipoma: a systematic review of the literature". *Anticancer Research* 34.11 (2014): 6271-6276.
8. Zhang X., *et al.* "Large ulcerated cecal lipoma mimicking malignancy". *World Journal of Gastrointestinal Oncology* 2.7 (2010): 304-306.
9. L Jiang., *et al.* "Giant submucosal lipoma located in the descending colon: a case report and review of the literature". *World Journal of Gastroenterology* 13.42 (2007): 5664-5667.

10. O Ozen, *et al.* "Giant colonic lipoma causing intussusception: CT scan and clinical findings". *Pan African Medical Journal* 32 (2019): 27.
11. D Crocetti, *et al.* "Surgery for symptomatic colon lipoma: a systematic review of the literature". *Anticancer Research* 34.11 (2014): 6271-6276.
12. Yoshii H, *et al.* "Surgical resection for hemorrhagic duodenal lipoma: a case report". *Tokai Journal of Experimental and Clinical Medicine* 45.2 (2020): 75-80.
13. S Paškauskas, *et al.* "Colonic intussusception caused by colonic lipoma: a case report". *Medicina (Kaunas)* 46.7 (2010): 477-481.

**Volume 11 Issue 5 May 2024**

**©All rights reserved by Sara Essetti, *et al.***