Scholars Journal of Medical Case Reports
Abbreviated Key Title: Sch J Med Case Rep
ISSN 2347-9507 (Print) | ISSN 2347-6559 (Online)
Journal homepage: https://saspublishers.com

OPEN ACCESS

Radiology

Torsion of a Pedunculated Parietal Lipoma: A Rare Cause of Bowel Obstruction

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DOI: 10.36347/sjmcr.2023.v11i03.010 | **Received:** 06.01.2023 | **Accepted:** 19.02.2023 | **Published:** 11.03.2023

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Abstract **Case Report**

Lipomas of the small intestine are rare benign tumors, often asymptomatic and rarely complicating intestinal obstruction. Acute manifestations, such as partial or complete obstruction, are uncommon. We report a case of intestinal obstruction due to torsion of a pedunculated parietal lipoma in a 36-year-old woman admitted for acute abdominal pain with an absence of passage of flatus and feces. CT scan confirmed the diagnosis of bowel obstruction and showed a fatty mass. Surgery consisted of a tumerectomy. Pathological examination confirmed the diagnosis of a lipocytic lipoma.

Keywords: Parietal pedunculated lipoma, bowel obstruction, CT scan.

INTRODUCTION

Lipomas of the gastrointestinal tract (GIT) are rare benign mesenchymal tumors. They are often asymptomatic. Only 6% of lipomas are symptomatic [1]. They are most often discovered during complications. Intestinal obstructions secondary to intestinal lipomas result from intussusception in the majority of documented case reports [2]. There have been reports of small bowel lipomas causing obstructions following intussusception, but none have reported an obstruction following torsion of a lipoma. We report a case of bowel obstruction following torsion of a parietal lipoma.

CASE REPORT

We report the case of a 36-year-old single woman with no previous pathological history, notably never operated on, admitted to the emergency room for an obstructive syndrome with acute abdominal pain and cessation of feces and gas for 4 days. The physical examination revealed meteorism with diffuse abdominal tenderness without palpable mass. The hernial orifices were free. The rectal ampulla was empty on rectal examination. The biological work-up was unremarkable.

The X-ray without preparation of the abdomen showed multiple central hydroaeric levels, wider than high, suggesting a small intestine obstruction.

The CT scan showed an oblong formation opposite the last ileal loop measuring 23 x 12 x 34 mm, with fatty density upstream of an area of disparity in caliber responsible for distension of the ileal coves measuring 39 mm in diameter which is the site of hydroaeric levels (figure 1 and 2).

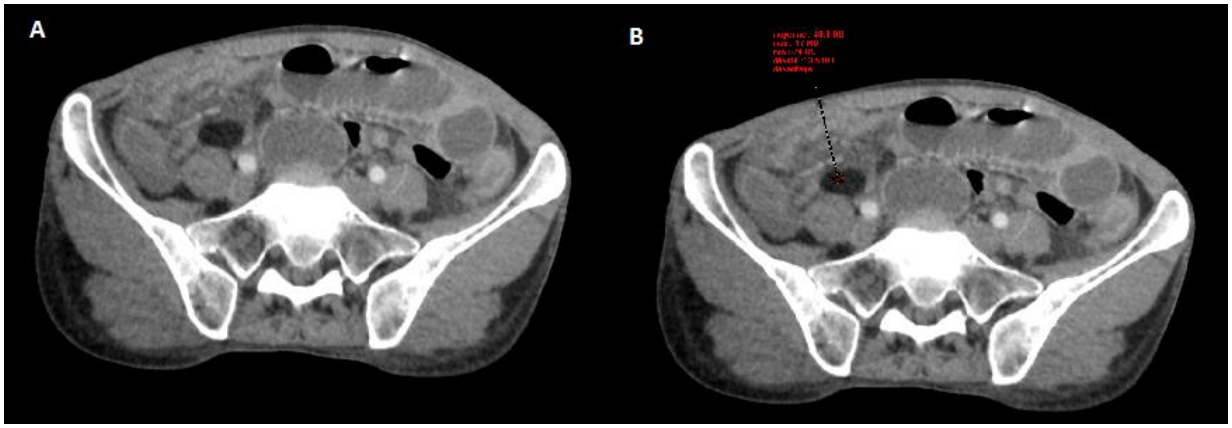

Figure 1(A et B): Abdominal CT scan in axial slices showing distension of the bowel with individualization fatty oblong formation opposite the last ileal loop

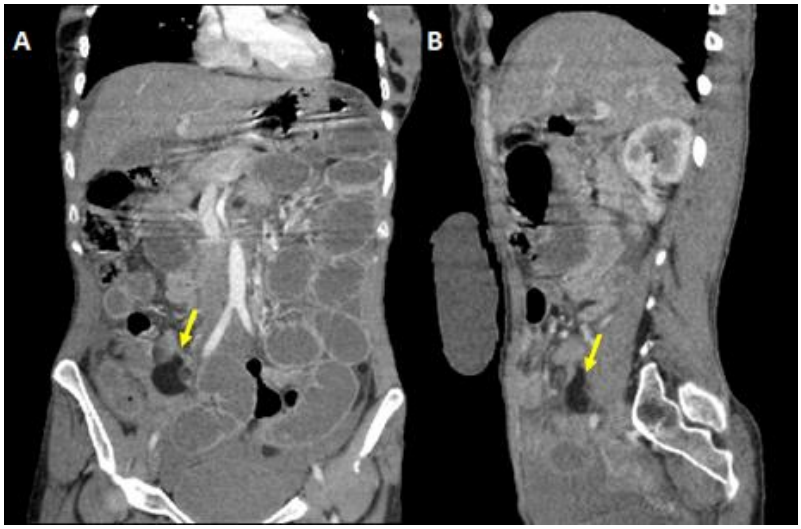

Figure 2: A: coronal plane, B: sagittal plane. CT scan showed the fatty formation (yellow arrow)

Surgical exploration revealed a distended bowel upstream of a pedunculated parietal bowel lipoma taking the last ileal loop and another loop 60 cm from the ileocaecal junction with no signs of bowel ischemia the operation consisted of a tumerectomy (figure 3).

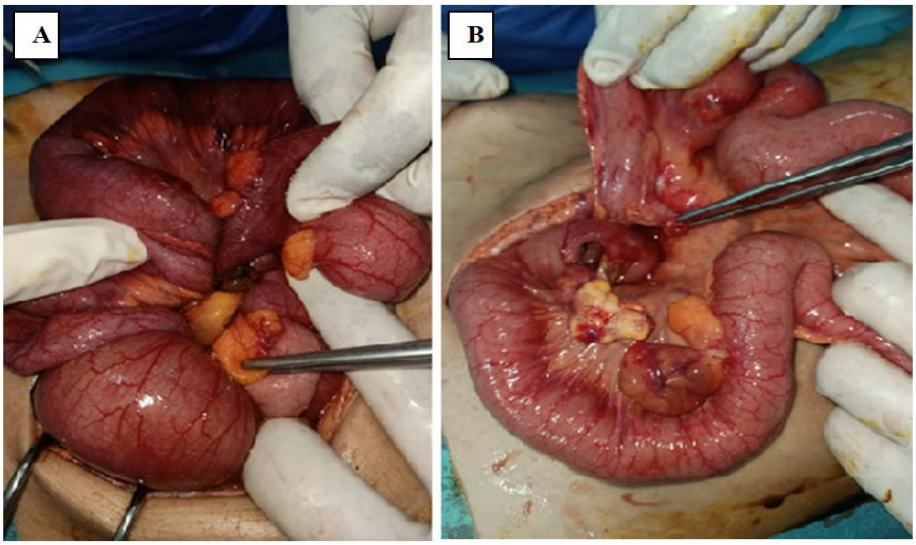

Figure 3: Per-operative images. A: image showing torsion of the pedunculated lipoma with distension of the bowel B: release of the trapped loop

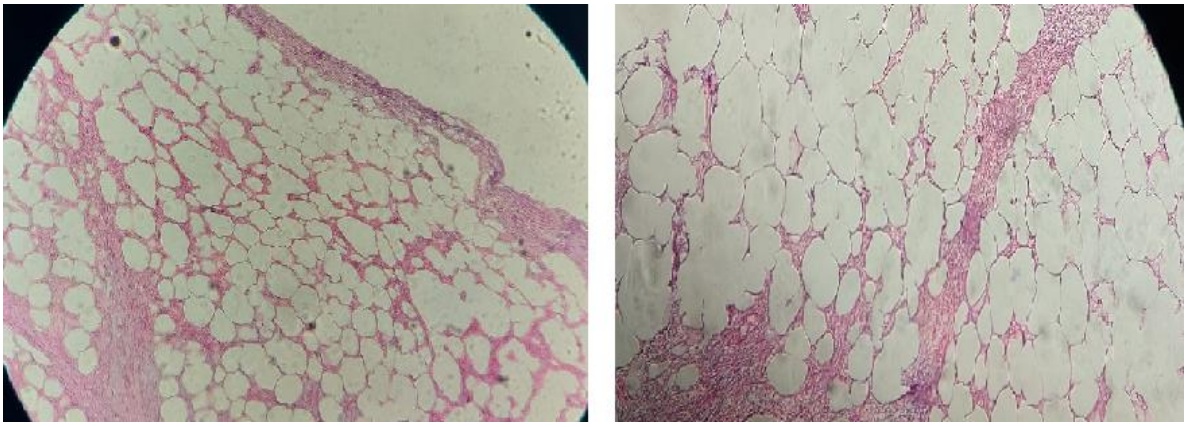

Figure 4: A histopathological examination of the surgical specimen showing adipose lobules separated by fibrous septa

The specimen was examined. Macroscopically, it was a yellowish formation with a soft consistency and some hemorrhagic changes. Histologically, it was a benign mesenchymal proliferation, partially encapsulated, organized in adipose lobules separated by fibrous septa, concluding in a lipocytic lipoma (figure 4).

DISCUSSION

Lipomas of the gastrointestinal tract are rare benign tumors of mesenchymal origin. Small bowel tumors account for 1-2% of all gastrointestinal tumors, 30% of which are benign [3]. The majority of lipomas occur in the colon. Approximately 20-25% of gastrointestinal lipomas occur in the small intestine, with the ilium being the most common location [2, 4].

Gastrointestinal lipomas are rarely symptomatic. Lesions larger than 2 cm in diameter may cause nonspecific symptoms such as abdominal pain, diarrhea, and gastrointestinal bleeding [4]. Acute manifestations, such as partial or complete obstructions, are uncommon [5]. Intestinal obstructions secondary to intestinal lipomas result from intussusception in the majority of documented case reports [2, 3]. In our patient, the obstruction was caused by torsion of the pedunculated lipoma, a rare cause of obstructions.

The lipoma can be found in young persons, but its frequency increases with age [6, 7]. It develops in 90% of cases at the expense of submucosal adipocytes.

The CT scan is the key investigation. It allows the diagnosis of the obstructive syndrome, its mechanism, its precise location, the signs of intestinal ischemia and evokes its cause [7]. It represents a sensitive and specific method for the diagnosis of lipomas. It shows a well-circumscribed, fat-dense mass.

Treatment depends mainly on the clinical picture, size, and location of the lipoma. Asymptomatic lipoma requires only follow-up. Symptomatic lipoma requires treatment such as endoscopic or surgical resection [8]. Resection is recommended for lipomas larger than 4 cm in diameter, those with an unclear preoperative diagnosis, or if it is symptomatic [8].

The pathological study is necessary for diagnostic confirmation and should be complemented in some cases by an immunohistochemical study [7].

CONCLUSION

Lipomas of the gastrointestinal tract are rare, benign mesenchymal tumors, often asymptomatic. They are most often discovered in the course of complications. CT scans play an important role in making the diagnosis. The treatment remains surgical if the lipoma is symptomatic.

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