

2(2): 053-055; April 2023 Pediatric Academic Case Reports

DOI: 10.61107/pacr.2023.062

# Case Report

# Mesenteric lipoma in a child: A case report

# Mezenterik lipom: Olgu sunumu

Tülin Öztaş<sup>1</sup>, Muhammet Asena<sup>2</sup>

<sup>1</sup>University Of Health Sciences Diyarbakır Gazi Yaşargil Training And Research Hospital,, Pediatric Surgery, Diyarbakır, Türkiye <sup>2</sup>University Of Health Sciences Diyarbakır Gazi Yaşargil Training And Research Hospital,, Pediatric, Diyarbakır, Türkiye

## **ABSTRACT**

Lipoma is a benign tumor of mature fat cells. It quite rarely occurs in the intestinal mesentery in children. Mesenteric lipomas usually do not cause gastrointestinal symptoms unless they affect the intestinal passage. However, as the mass grows, symptoms suggestive of partial intestinal obstruction, such as abdominal pain, vomiting, and abdominal distension, may be observed, or total intestinal obstruction may develop due to volvulus. In our study, a case with mesenteric lipoma with acute abdominal findings was presented. A four-year-old male patient presented with abdominal pain and vomiting. On physical examination, the patient was agitated and dehydrated, the abdomen was distended, and there was widespread tenderness; however, the mass was not palpable. Computed Tomography (CT) revealed a suspicious appearance for leiomyosarcoma with a size of 102x79x87 mm in fat density containing septa. In the exploration, a 120x120x70 mm encapsulated, lobular mass was detected 50 cm proximal to the ileocecal valve, covering the 10 cm ileal segment. The mass was excised totally together with a 10 cm small intestine segment, and ileal anastomosis was performed. The diagnosis of mesenteric lipoma was confirmed histopathologically. As a result, mesenteric lipoma, which is rare in children, is a benign pathology, and its treatment is total surgical excision. In children with signs of intestinal obstruction, mesenteric lipoma should be considered in the differential diagnosis, whether the mass is palpated or not.

**Keywords:** Acute abdomen, intestinal obstruction, mesenteric lipoma, volvulus

# ÖZET

Lipom matür yağ hücrelerinin iyi huylu tümörüdür. Çocuklarda çok nadiren bağırsak mezenterinde görülmektedir. Mezenterik lipomlar genelde bağırsak pasajını etkilemediği sürece gastrointestinal sistem semptomlarına neden olmaz. Ancak kitle büyüdükçe karın ağrısı, kusma, abdominal distansiyon gibi kısmi bağırsak tıkanıklığı düşündüren semptomlar gözlenebilir veya volvulusa bağlı olarak total bağırsak tıkanıklığı gelişebilir. Çalışmada dört yaşında bir erkek hastada akut batın bulgularına yol açan mezenterik lipom vakası sunuldu. Karın ağrısı ve kusma şikâyeti olan hastanın fizik muayenesinde ajite, dehidrate, batın distandü ve yaygın hassasiyet vardı, kitle saptanmadı. Ameliyat öncesi yapılan Computed Tomografide (CT) septalar içeren yağ dansitesinde 102x79x87 mm boyutunda leiomyosarkom açısından şüpheli görünüm saptandı. Operasyonda ileoçekal valvin 50 cm proksimalinde, 10 cm ileal segmenti içine alan 120x120x70 mm kapsüllü, lobuler kitle vardı. Kitle 10 cm ince bağırsak ile birlikte eksize edilerek ileal anastomoz yapıldı. Histopatolojik olarak mezenterik lipom tanısı doğrulandı. Sonuç olarak çocuklarda nadir görülen mezenterik lipom benign bir patolojidir ve tedavisi total cerrahi eksizyondur. İntestinal obstrüksiyon bulguları olan çocuklarda kitle palpe edilsin veya edilmesin mezenterik lipom ayırıcı tanıda göz önünde bulundurulmalıdır.

Keywords: Akut batın, intestinal obstrüksiyon, mezenterik lipom, volvulus

**Received:** 15.12.2022 · **Accepted:** 27.01.2023 · **Published:** 30.04.2023

Correspondence / Yazışma: Tülin Öztaş · SBÜ Diyarbakır, Gazi Yaşargil Eğitim ve Araştırma Hastanesi, Çocuk Cerrahisi Kliniği, Diyarbakır, Türkiye · tulinoztas@hotmail.com

Cite this article as: Oztas T, Asena M. Mesenteric lipoma in a child: A case report. Pediatr Acad Case Rep. 2023;2(2):53-55.

Pediatr Acad Case Rep Mesenteric lipoma

## INTRODUCTION

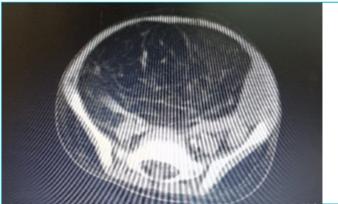
Lipoma is a benign tumor of mature fat cells (1,2). It can be seen in many parts of the body, such as the chest, chest wall, mediastinum, pleura, pelvis, retroperitoneum, and scrotum (3). Lipomas located especially in the intestinal mesentery are rare in children (1,3-5). Mesenteric lipomas are slow-growing soft, mobile and benign masses that do not infiltrate the surrounding tissue and do not cause gastrointestinal system symptoms unless they affect the intestinal passage (3,6,7). It is mostly asymptomatic, but nonspecific findings, such as abdominal pain, vomiting, and abdominal distension, can be observed (3). As the mass grows, partial bowel obstruction or, to a lesser extent, total bowel obstruction may develop due to volvulus (2,8-10). In our study, a case with mesenteric lipoma with acute abdominal findings was presented.

# **CASE REPORT**

A four-year-old male patient presented with abdominal pain and vomiting. On physical examination, the patient was agitated and dehydrated, the abdomen was distended, and there was widespread tenderness; however, the mass was not palpable. It was learned that he had a previous loss of appetite, intermittent abdominal pain and vomiting attacks. Further, antibiotic treatment was applied to the patient 15 days ago due to acute tonsillitis. Laboratory test results were normal. The standing direct abdominal X-ray revealed an airfluid level consistent with the ileus (Figure 1). Ultrasonography (USG) revealed dilatation and loss of peristalsis in the small intestines and a 128x64x88 mm mass in the pelvic region in the fat echo that did not show obvious vascularity. CT revealed a suspicious appearance for leiomyosarcoma with a size of 102x79x87 mm in fat density containing septa (Figure 2). In the exploration, a 120x120x70 mm encapsulated, lobular mass was detected 50 cm proximal to the ileocecal valve, covering the 10 cm ileal segment. The proximal intestines were dilated, and the volvulus that did not cause ischemia was present. The mass was excised totally together with a 10 cm small intestine segment, and ileal anastomosis was performed. The diagnosis of mesenteric lipoma was confirmed histopathologically. The patient was discharged uneventfully on the sixth postoperative day. No recurrence or other pathology was detected in the USG performed during the six-month and one-year follow-ups of the patient. The consent of the patient's parents were obtained to conduct this case study.



Figure 1. Direct abdominal X-ray demonstrated ileus



**Figure 2.** Abdominal computed tomography revealed a mass with fat density containing septa

## **DISCUSSION**

Although lipoma is detected in many parts of the body, it is rarely seen in the intestinal mesentery (3,7). It has been reported to be more common in childhood, especially in those younger than three years (6). It is mostly asymptomatic and incidental, but nonspecific symptoms, such as progressive abdominal distension, vomiting, anorexia, abdominal pain, feeling full after meals, and constipation, can be observed (2,3). Mesen-

Pediatr Acad Case Rep T. Öztaş, M. Asena

teric lipomas are slow-growing masses and may lead to complete intestinal obstruction by causing volvulus or partial due to compression as the mass grows (3,11,12). It is challenging to make a preoperative diagnosis in the early period. However, when it reaches large sizes, abdominal distension can be seen in patients, and a soft, mobile mass can be palpated on physical examination. In our case, in accordance with the literature, there were intermittent abdominal pain, loss of appetite, and vomiting symptoms in the history. Before the operation, the mass reached 120 mm, and the ileus developed due to compression. It may be possible to make an early diagnosis by keeping mesenteric lipoma in mind in children with intermittent findings of intestinal obstruction. USG, CT, and magnetic resonance imaging can be used in the diagnosis (9).

Although mesenteric lipomas are benign masses that do not penetrate the surrounding organs, they are recommended to be removed completely with or without the intestine (11). The definitive diagnosis is reached by histopathology (9). It has been reported that approximately 5% recurrence occurs, which may be due to inadequate excision (3). In our study, the mass was totally excised with the small intestine, and no complications or recurrences were detected in the follow-up of the patient six months and one year later. It is significant to monitor patients for recurrence after surgery, and the USG can be performed to detect possible recurrence.

As a result, mesenteric lipoma, which is rare in children, is a benign pathology, and its treatment is total surgical excision. In children with signs of acute intestinal obstruction, mesenteric lipoma should be considered in the differential diagnosis, whether the mass is palpated or not.

### Patient Consent Form / Hasta Onam Formu

The parents' of this patient consent was obtained for this study.

#### Conflict of Interest / Çıkar Çatışması

The authors declared no conflicts of interest with respect to authorship and/or publication of the article.

#### Financial Disclosure / Finansal Destek

The authors received no financial support for the research and/or publication of this article.

## **REFERENCES**

- 1. Gentimi F, Tzovaras AA, Antoniou D, et al. A giant mesenteric lipoblastoma in an 18-month old infant: a case report and review of the literature. Afr J Paediatr Surg 2011; 8: 320-3.
- Alsayegh RO, Almutairi R, Taqi E, et al. Mesenteric lipoma presenting as small bowel volvulus. J Ped Surg Case Reports 2019; 43: 47-9.
- 3. Tayeh C, Mneimneh S, El-Masri R, et al. Giant mesenteric lipoma: A case report and a review of the literatüre. J Ped Surg Case Reports 2015; 3: 166-70.
- 4. Malik H, Mirza B, Talat N, et al. Mesenteric Lipoma with Volvulus: A Rare Cause of Acute Abdomen in a Child. J Coll Physicians Surg Pak 2020; 30: 650-1.
- 5. Laguna BA, Iyer RS, Rudzinski ER, et al. Torsion of a giant mesocolic lipoma in a child with Bannayan-Riley-Ruvalcaba syndrome. Pediatr Radiol 2015; 45: 449-52.
- Hashizume N, Aiko T, Fukahori S, et al. Benign mesenteric lipomatous tumor in a child: a case report and literature review. Surg Case Rep 2020; 6: 243.
- Hamidi H, Rasouly N, Khpalwak H, et al. Childhood giant omental and mesenteric lipoma. Radiol Case Rep 2016; 11: 41-4.
- 8. Turk E, Edirne Y, Karaca F, et al. A rare cause of childhood ileus: giant mesenteric lipoma and a review of the literature. Eurasian J Med 2013; 45: 222-5.
- 9. Maree G, Gawrieh B, Omran A, et al. A rare lipoma site in a 1-year-old boy. J Surg Case Rep 2021; 10: 447.
- 10. Yang C, Wang S, Zhang J, et al. An unusual cause of paediatric abdominal pain: Mesenteric masses accompanied with volvulus. Turk J Gastroenterol 2016; 27: 325-9.
- Azhar M, Zamir N, Jabbar A. Giant Mesenteric Lipoma- A Rare Tumour Of Paediatric Age. J Ayub Med Coll Abbottabad 2021; 33: 339-40.
- 12. Nagano Y, Uchida K, Inoue M, et al. Mesenteric lipoblastoma presenting as a small intestinal volvulus in an infant: A case report and literature review. Asian J Surg 2017; 40: 70-3.