Open Journal of
Clinical & Medical
Case Reports

Volume 4 (2018)
Issue 20

ISSN 2379-1039

A rare case of a mesenteric hemangioma

Ahmed H*; Blietz J; Strauss R; Freys SM

***Hytham Ahmed**

Surgical Department, DIAKO Ev. Diakonie-Krankenhaus gemeinnützige GmbH, Parkstrasse 59, 28209 Bremen, Bremen, Germany
Email: hytham.ahmed81@yahoo.com

Abstract

Primary mesenteric tumors are rare. A small number of cases with a hemangioma originating from the mesentery have been reported. A mesenteric hemangioma may be solitary or multiple. We present a case of a 55-year-old male patient with a mesenteric hemangioma who presented with abdominal pain. The investigations revealed a mesenteric mass. We have indicated and successfully performed surgical tumor resection. Mesenteric hemangiomas can cause many nonspecifc symptoms. A reliable diagnosis based on the morphological criteria is frequently not possible, therefore surgical excision is always indicated.

Keywords

mesentery; hemangioma; mesenteric tumors; mesenteric hemangioma

Abbreviations

CT: Computed tomography scan

Introduction

The majority of tumors affecting the mesentery are metastases of an intra-abdominal neoplasm. Primary mesenteric neoplasms are mainly benign [1,2]. Hemangiomas represent a rarity among the primary mesenteric tumors. We report a case of a patient with a mesenteric hemangioma, which was diagnosed during investigations due to abdominal pain. In addition, we present a literature review of mesenteric tumors.

Case Presentation

A 55-year-old patient presented in our emergency department due to sustained abdominal pain in the right lumbar region for several days. The symptoms were recurrent in the last six months. Gastrointestinal and B- symptoms were not reported. The physical examination showed marked tenderness in the right lumbar and iliac regions. The rest of the physical examination was unremarkable.

Laboratory evaluation revealed a moderately elevated C-reaktive protein of 9.2 mg/dl and a normal leukocyte count. An ultrasound examination was limited due to obesity and could not show any abnormalities. Computed tomography scan (CT) of the abdomen revealed a relatively sharply circumscribed, irregular lobulated mass of 14 x 13 cm, extending from mesentery of the jejunum and reaching the cecum and surrounding some small intestinal loops (Figures 1 & 2). Neither the CT of the abdomen nor the chest x-ray showed evidence of metastatic lesions.

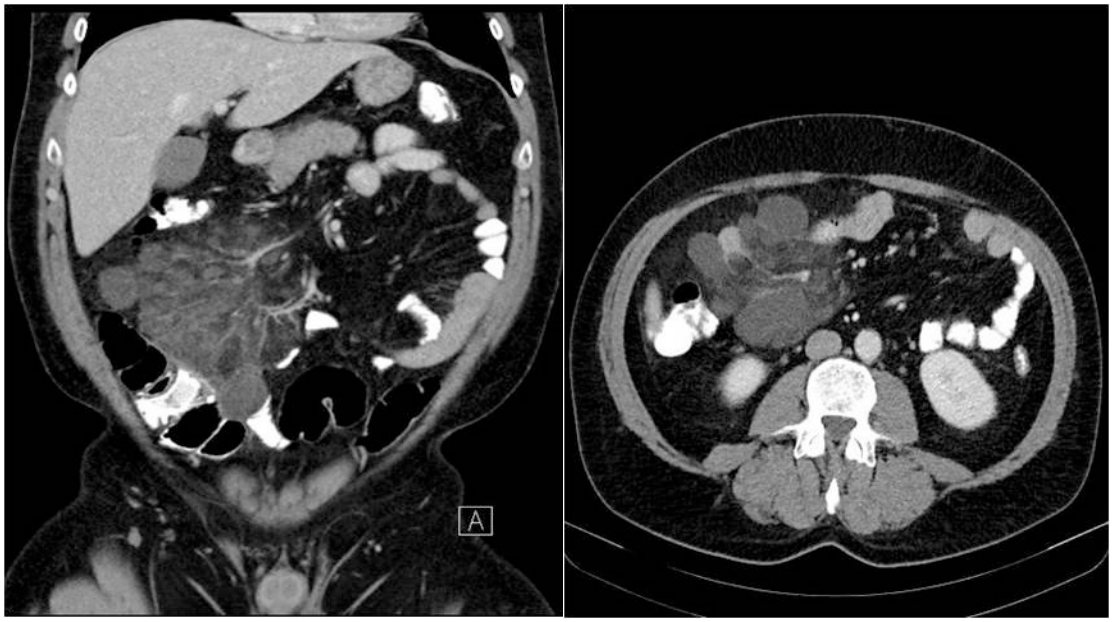

Figure 1,2: CT shows a lobulated tumor arising from the mesentery

After discussing the case in our interdisciplinary tumor board, we have taken the indication to an exploratory laparoscopy and if applicable a complete tumor resection. A preoperativ biobsy was not applicable due to the location of the mass. The operation was performed electively. Intraoperatively we found an approximately 15 x 15 cm multilobular tumor with a greasy-soft consistency emerging from the mesentery of the jejunum (Figure 3). After conversion to a laparotomy, we were able to resect the tumor completely with a 20 cm jejunal loop.

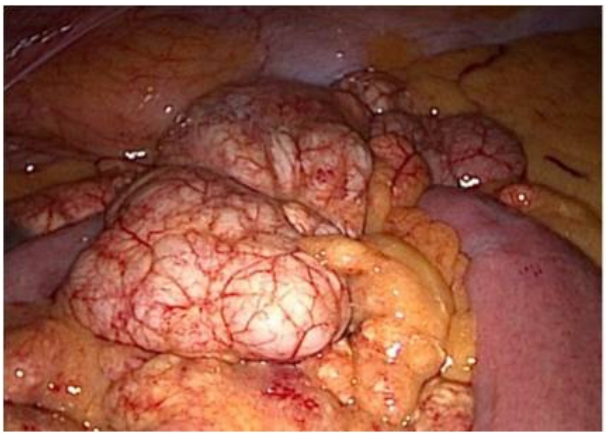

Figure 3: The intraoperative fnding

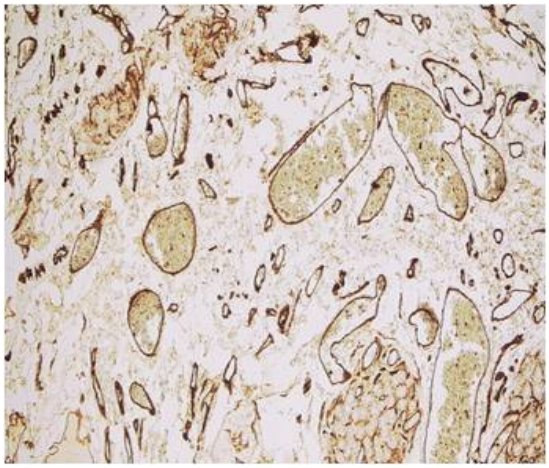

Figure 4: Positive expression of CD31 (25x magnifcation)

The postoperative course was uneventful, we started the patient's oral intake gradually at the 2 postoperative day. The patient was discharged on the 6th postoperative day.

The histological result showed dilated to pseudocystic vascular formations with focal endothelial lining. Partially erythrocyte extravasates and partially foam cell transformed macrophages were found intraluminally. The Elastica van Gieson staining showed focal venous vascular walls. However with the immunohistochemical expression of CD31 and CD34 and at the same time negativity for D2-40 the lesion could fnally be diagnosed as a hemangioma after exclusion of a lymphangioma.

Discussion

There are numerous cystic and solid lesions that could be found in the mesentery (Table 1) [3]. Mesenteric primary neoplasms are rare and predominantly benign. Contrarily mesenteric metastases of a malignant neoplasm are much more common [1,2].

Primary mesenteric tumors were described as cystic in 40-60% of cases [4]. In the literature, there is a few number of case reports of mesenteric hemangiomas that affect the intestine and emerge from the intestinal wall [5].

Symptoms of mesenteric neoplasms are mainly nonspecifc such as abdominal pain, weight loss or palpable tumor [6]. In case of involvement of the intestinal lumen gastrointestinal bleeding or intussusception with the clinical presentation of an intestinal obstruction may occur. Extraluminal hemorrhage into the peritoneal cavity may lead to the formation of a hemoperitoneum with acute abdominal pain and increased abdominal circumference [7,8].

Hemangiomas are benign tumors that could be found in any organ. They are, more specifcally, vascular hamartomas of mesodermal origin. Hemangiomas are true neoplasms with endothelial lining. They are to be distinguished from vascular malformations, which are localized defects in vascular morphogenesis [9]. Abrahamson and Shandling's classifcation of intestinal hemangiomas could also be used for mesenteric hemangiomas. The three types are capillary type, cavernous type and cavernous mixed type [10].

Gastrointestinal hemangiomas may present as solitary or multiple lesions. Multiple lesions are most commonly associated with similar neoplasms elsewhere, and may be part of a syndrome such as Osler- Weber-Rendu, Maffucci, Klippel-Trenaunay or blue rubber bleb naevus [11].

The Sonography usually shows a solid mass with variable echogenicity. The CT scan provides moreover informations on the size of the tumor, multiplicity, vascularization and involvement of the gut or other intraabdominal or retroperitoneal structures. A mesenteric angiography may be helpful in case of acute bleeding, by providing both accurate tumor localization and offering the opportunity for an interventional embolization of the bleeding. However, this technique requires a suffcient bleeding rate (not less than 0.5 ml / min) to be conclusive.

Seth et al. has attempted to differentiate the mesenteric tumors based on their computed tomographic morphology [12]. However, a surgical intervention to confrm the diagnosis is always indicated.

Complete surgical tumor resection is the gold standard for treatment of mesenteric hemangiomas. Recurrence after complete removal of these tumors has not been reported so far. Of course, minimally invasive surgery is always an option, but there is a risk of tumor bleeding, especially in cases of large tumors [5].

In case of a radiologically diagnosed asymptomatic mesenteric hemangioma as an incidental fnding, which is probably impossible, we believe that an complete operative resektion is indispensable for confrming the diagnosis and excluding the malignant nature of the lesion.

Tables

Table 1: Differential diagnosis of mesenteric lesions

Cystic lesions
- Mesenteric cyst (lymphangioma, enteric cysts, non-pancreatic pseudocyst and mesothelial cyst)
- Peritoneal inclusion cyst
- Pancreatic pseudocyst
- Teratoma
- Peritoneal cystic mesothelioma
- Pseudomyxoma peritonei
- Mucinous carcinomatosis
- Cystic spindle cell tumors (leiomyoma, leiomyosarcoma)
Solid leisons
- Lymphoma and lymph node metastases
- Sclerosing mesenteritis
-Mesenteric Fibromatosis (Desmoid)
- Peritoneal mesothelioma
- Carcinoid
- Peritoneal carcinomatosis
- Gastrointestinal stromal tumors

Conclusion

Hemangiomas are benign tumors that rarely affect the mesentery. Follow-up is indicated after complete resection of a mesenteric hemangioma. A CT scan is indispensable for evaluating a mesenteric mass. However, the differential diagnosis of a mesenteric mass based on its computed tomographic morphology is highly unlikely. Mesenteric masses require a surgical intervention if there is no history of malignancy for further evaluation of their natur und therapy.

References

1. Guivarch M. Tumors of the mesentery: apropos of 102 cases. Ann Chir. 1994; 48: 7-16.

2. Metaxas G, Tangalos A, Pappa P, Papageorgiou i. Mucinous cystic neoplasms of the mesentery: a case report and review of the literature. World J Surg Oncol. 2009; 7: 47.

3. Hoon Ji. Ros PR. Tumors of the Mesentery and Omentum. In Gourtsoyiannis NC, Ros PR. Radiologic- Pathologic Correlations from Head to Toe: Understanding the Manifestations of Disease. Berlin: Springer. 2005; 447-470.

4. Pithawa AK, Bansal AS, Kochar SPS. Mesenteric cyst: A rare intra-abdominal tumour. Med J armed forces india. 2014; 70: 79-82.

5. Amati AL, Hecker A, Schwandner T, Ghanem H, Holler J, Reichert M. A hemangioma of the sigmoid colon mesentery presenting as a retroperitonealtumor: a case report and review. World J Surg Oncol. 2014; 12: 79.

6. Yaunopoulos K, Stout AP. Primary solid tumors of the mesentery. Cancer. 1963; 16: 914-927.

7. Ruiz AR Jr, Ginsberg AL. Giant mesenteric hemangioma with small intestinal involvement: an unusual cause of recurrent gastrointestinal bleed and review of gastrointestinal hemangiomas. Dig Dis Sci. 1999; 44: 2545-2551.

8. Weinste EC, Moertel CF, Waush JM. Intussuscepting hemangiomas of the gastrointestinal tract: report of a case and review of literature. Ann Surg. 1963; 157: 265-270.

9. George A, Mani V, Noufal A. Update on the classifcation of hemangioma. J Oral Maxillofac Pathol. 2014; 18: 117-120.

10. Abrahamson J, Shandling B. Intestinal hemangiomata in childhood and a syndrome for diagnosis: A collective review. J Pediatr Surg. 1973; 8: 487-495.

11. Ruiz AR, Gınsberg AL. Giant mesenteric hemangioma with small intestinal involvement: An unusual cause of recurrent gastrointestinal bleeding and review of gastrointestinal hemangiomas. Dig Dis Sci. 1999; 12: 2545-2551.

12. Sheth S, Horton KM, Garland MR, Fishman EK. Mesenteric Neoplasms: CT Appearances of Primary and Secondary Tumors and Differential Diagnosis. Radio Graphics. 2003; 23: 457-473.

Manuscript Information: Received: August 10, 2018; Accepted: October 23, 2018; Published: October 31, 2018

Authors Information: Ahmed H[1]*; Blietz J[2]; Strauss R[3]; Freys SM[1]

[1]Surgical Department, DIAKO Ev. Diakonie-Krankenhaus gemeinnützige GmbH, Bremen, Germany
[2]Radiology Clinic Dr. J. Blietz und C. Pietschmann, DIAKO Ev. Diakonie-Krankenhaus gemeinnützige GmbH, Bremen, Germany.
[3]Department of Pathology, Klinikum Bremen-Mitte, Bremen, Germany.

Citation: Ahmed H, Blietz J, Strauss R, Freys SM. A rare case of a mesenteric hemangioma. Open J Clin Med Case Rep. 2018; 1478.

Journal: Open Journal of Clinical and Medical Case Reports is an international, open access, peer reviewed Journal focusing exclusively on case reports covering all areas of clinical & medical sciences.

Visit the journal website at **www.jclinmedcasereports.com**
For reprints and other information, contact editorial office at **info@jclinmedcasereports.com**