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CASE REPORT

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Angiomyxolipoma of the spermatic cord: A case report

Melissa Kyriakos Saad[1] | **Georgio Sader**[2] | **Elias Saikaly**[3,4]

[1]Saint George Hospital University Medical Center, Beirut, Lebanon

[2]Faculty of Medicine, University of Balamand, Beirut, Lebanon

[3]Department of General Surgery, Saint George Hospital University Medical Center, Beirut, Lebanon

[4]Saint George University of Beirut, Beirut, Lebanon

Correspondence
Elias Saikaly, Department of General Surgery, Saint George Hospital University Medical Center, Beirut, Lebanon; Saint George University of Beirut, Beirut, Lebanon.
Email: dreliassaikaly@gmail.com

Key Clinical Message

Lipomas are considered one of the most frequent benign mesenchymal tumors with copious variants. Among these variants is angiomyxolipoma (AML) which is considered an extremely rare entity. To the best of our knowledge, only 19 cases have been reported in the English medical literature, of which three of them involving the spermatic cord. Herein, we report the fourth case of a 37-year-old male patient with angiomyxolipoma (AML) of the spermatic cord discovered incidentally during elective hernia repair.

KEYWORDS

angiomyxolipoma, inguinal hernia, inguinal mass, lipoma

1 | INTRODUCTION

Reported for the first time in 1996 by Mai et al.,[1] angiomyxolipoma of the spermatic cord is considered an extremely rare variant of lipoma. It is characterized by a proliferative network of mature adipose tissue in a background of variable amount of myxoid stroma with numerous proliferating blood vessels, giving the name of angiomyxolipoma.[1] The kidneys are the most common site of origin and are considered the most common benign resectable kidney tumors.[2] Occurrence at other anatomical sites is very rare.[3] Review of the English medical literature reveals 19 cases of angiomyxolipoma with only three cases involving the spermatic cord reported till date. Herein, we present the fourth case of spermatic cord AML.

2 | CASE REPORT

2.1 | Case history and examination

A 37-year-old male patient with no past medical history presenting with right inguinal bulge of 7-month duration, slowly increasing in size since first noticed. Physical examination reveals normal vital signs. Abdominal examination showed a reducible right inguinal hernia.

Differential diagnosis: Patient diagnosed with right inguinal hernia and was scheduled for open right inguinal hernia repair.

Treatment: Intraoperative findings include a direct right inguinal hernia and spermatic cord lipoma. Hernia was repaired using a light weight mesh and excision of the

spermatic cord lipoma measuring 4×5 cm (Figure 1) was done and sent for definitive pathology.

Results: The patient had an uneventful stay and was discharged at the same day of surgery. Final pathology revealed a lobular lesion composed of proliferating vascular network associated with fatty tissue and varying amount of myxoid stroma favoring the diagnosis of angiomyxolipoma of the spermatic cord (Figure 2A,B). This was followed by abdomen pelvis CT scan to rule out tumor at other sites, mainly renal ones, which turned out to be normal.

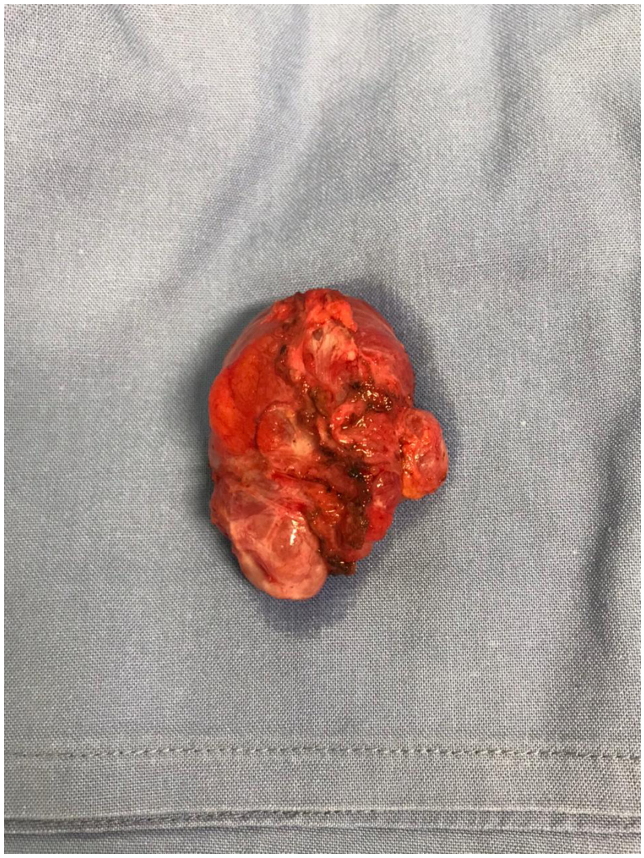

FIGURE 1 Resected specimen.

3 | DISCUSSION

Lipomas are considered one of the most common benign mesenchymal tumors with plentiful of variants.[4] Among these variants is angiomyxolipoma (AML) which is considered an extremely rare entity, whereby, only 19 cases have been reported in the English medical literature. It typically occurs in the kidneys accounting for 1% of all kidney tumors. Extrarenal AML is remarkably uncommon.[5] After kidneys, the liver and the skin are the next most common sites of AML origin. Even rarer is angiomyxolipoma of the spermatic cord, where to the best of our knowledge, only three cases have been reported and we report the fourth case of spermatic cord angiomyxolipoma. Beforehand AMLs were thought to be hamartomatous lesions. However, currently it is known that AML originates from the perivascular epithelioid cells (PEC) and belongs to a family of tumors named "PEComas." Reported for the first time in the medical literature in 1996 by Mai et al.[1] The histological findings of AML tend to have triphasic features: myoid spindle cells, islands of fat tissue, and dysmorphic blood vessels that have thick walls and do not have elastic lamina.[6,7] It is characterized by proliferative network of mature adipose tissue in a background of variable amount of mixoid stroma with numerous proliferating blood vessels. The histologic differential diagnosis includes angiolipomas, angiofibroma, myxolipoma, and myxoid liposarcoma. Angiomyxolipoma of the spermatic cord may be asymptomatic and diagnosed incidentally during the hernia repair, but may present as a slowly growing painless mass. The differential diagnosis based on hostologic features includes angiolipomas, angiofibroma, myxolipoma, and myxoid liposarcoma and angiomyxolipoma is of utmost importance as this will avoid aggressive surgical treatment carried out to treat myxoid liposarcoma.

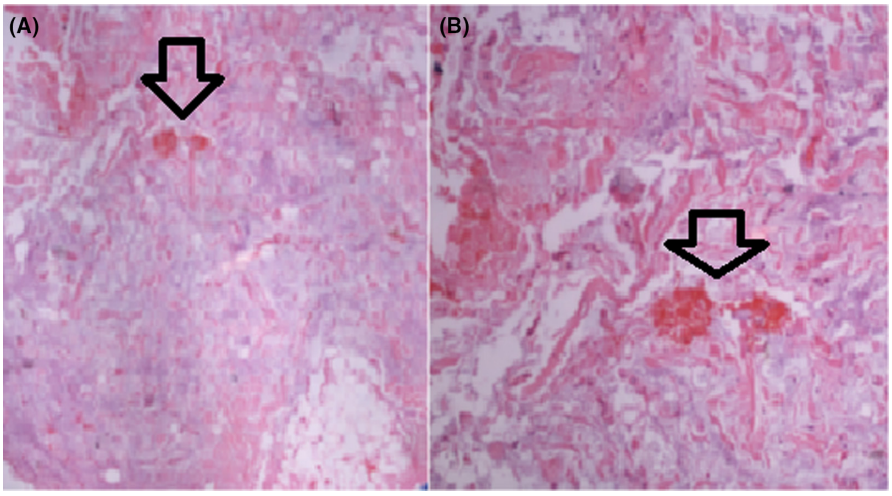

FIGURE 2 (A) Low power microscopic image (H&E×4) showing a mixture of mature fat cells separating collagen fibers and blood vessels. (B) Intermediate power (H&E×10) vascular, myxoid and lipoid elements.

Follow-up of the patient and outcome:

1-year follow-up after surgery the patient has no complaints.

AUTHOR CONTRIBUTIONS

Melissa Kyriakos Saad: Project administration; resources; supervision; writing – original draft; writing – review and editing. **Georgio Sader:** Resources; writing – original draft; writing – review and editing. **Elias Saikaly:** Conceptualization; investigation; project administration; resources; supervision; validation; visualization; writing – original draft; writing – review and editing.

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None.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author.

CONSENT

Written informed consent was obtained from the patient to publish this report in accordance with the journal's patient consent policy.

ORCID

Elias Saikaly https://orcid.org/0000-0003-3187-4694

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