

Papillary endothelial hyperplasia (Masson's lesion) of the lateral malleolous: A case report

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ABSTRACT

Introduction: Masson's lesion or also known as Intravascular [papillary endothelial hyperplasia](#) is a rare form of reactive endothelial proliferation which can mimic benign and malignant [vascular tumors](#). It commonly occurs on the head, neck, trunk, and upper extremities, but rarely in the foot. It is important to include it in the differential diagnosis of malignant vascular neoplasms, such as angiosarcoma, in order to avoid aggressive treatment.

Aim: We present a case of this type of tumor at the lateral region of the foot. Our aim is to describe the pathogenic and histologic features of this lesion.

Material and methods: Male patient, 41 years old, presented to our office for a consultation about a mass on the lateral side of his right foot, which gradually increased in size 4 months ago. He reports a direct impact injury about a year ago. He got an x-ray that showed nothing pathological. The MRI scan that followed revealed a cystic formation sized 1,5x1,5 cm. It had no contact with the lateral malleolus and after the injection of contrast agent showed enhancement on the periphery of the mass.

Results: The patient underwent excision under general anesthesia. The histological examination confirmed that the lesion was indeed Masson's Tumor. There were no complications or recurrences after successful surgical excision.

Conclusions: Masson's lesion presenting on the lateral aspect of the foot is vary uncommon. Radiologic diagnosis may be limited for diagnosis, and histologic confirmation should be made after surgical excision. There are some reports suggesting an association between trauma and Masson's lesion occurrence, but this is not yet conclusive.

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INTRODUCTION

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METHODS AND MATERIALS

Male patient, 41 years old, presented to our office for a consultation about a mass on the lateral side of his right foot, which gradually increased in size 4 months ago. He reports a direct impact injury about a year ago. He got an x-ray that showed nothing pathological. The MRI scan that followed revealed a cystic formation sized 1,5x1,5 cm. It had no contact with the lateral malleolus and after the injection of contrast agent showed enhancement on the periphery of the mass.

RESULTS

The patient underwent excision under general anesthesia. The histological examination confirmed that the lesion was indeed Masson's Tumor. There were no complications or recurrences after successful surgical excision.

DISCUSSION

In 1923, Pierre Masson first described a peculiar angiosarcoma-like appearance within thrombus in hemorrhoid plexus and termed it as "hemangioendotheliome vegetant intravasculaire," regarding it as a true neoplasm. However, Clearkin and Enzinger recognized it as a reactive lesion rather than a neoplastic process. Although it occurs commonly on the skin and subcutaneous tissue of head, neck, trunk, and upper extremities, it also occurs in the adrenal gland, heart, intestine, kidney, liver, and retroperitoneum. Only a few cases of IPEH developed in foot were reported.

DISCUSSION

The main pathological problem might be its similarity with malignant vascular tumors like angiosarcoma or Kaposi sarcoma. However, intravascular location, papillary structures supported by the core of thrombus, lack of cellular atypia, and rare but normal mitotic figures might be the histologically essential characteristics for the differential diagnosis.

The pathogenesis of IPEH is unclear. Several investigators have described that this reactive process could be related to the antecedent history of trauma of endothelium and consequently formed thrombus. However, only 4% of the 314 cases in the reviewed literature was related to trauma.

CONCLUSIONS

Masson's lesion presenting on the lateral aspect of the foot is vary uncommon. Radiologic diagnosis may be limited for diagnosis, and histologic confirmation should be made after surgical excision. There are some reports suggesting an association between trauma and Masson's lesion occurrence, but this is not yet conclusive.

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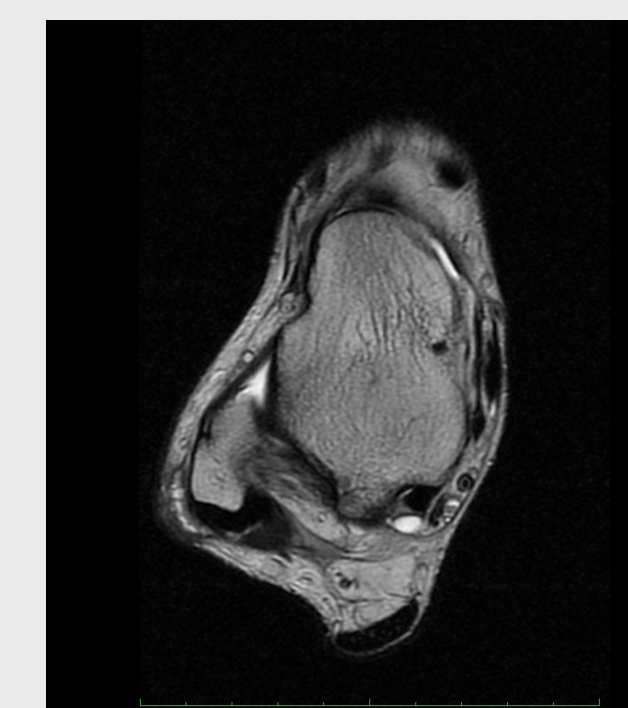


Figure 1

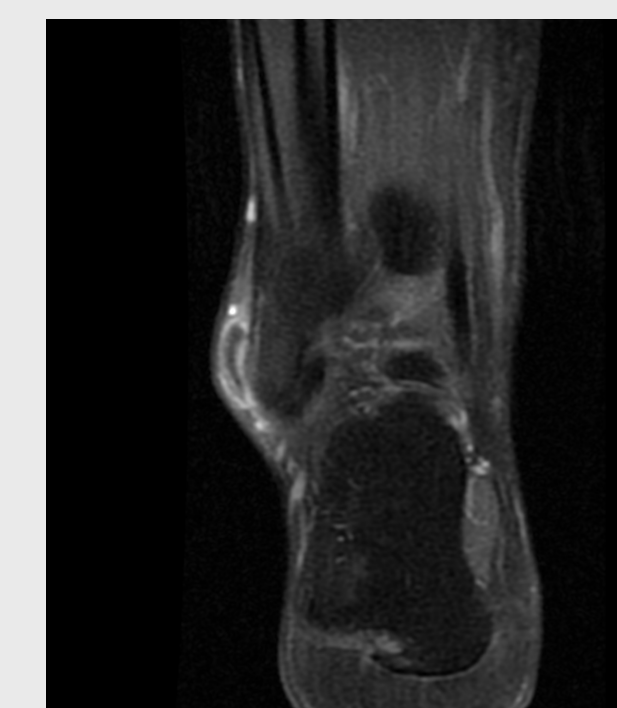


Figure 2



Figure 4

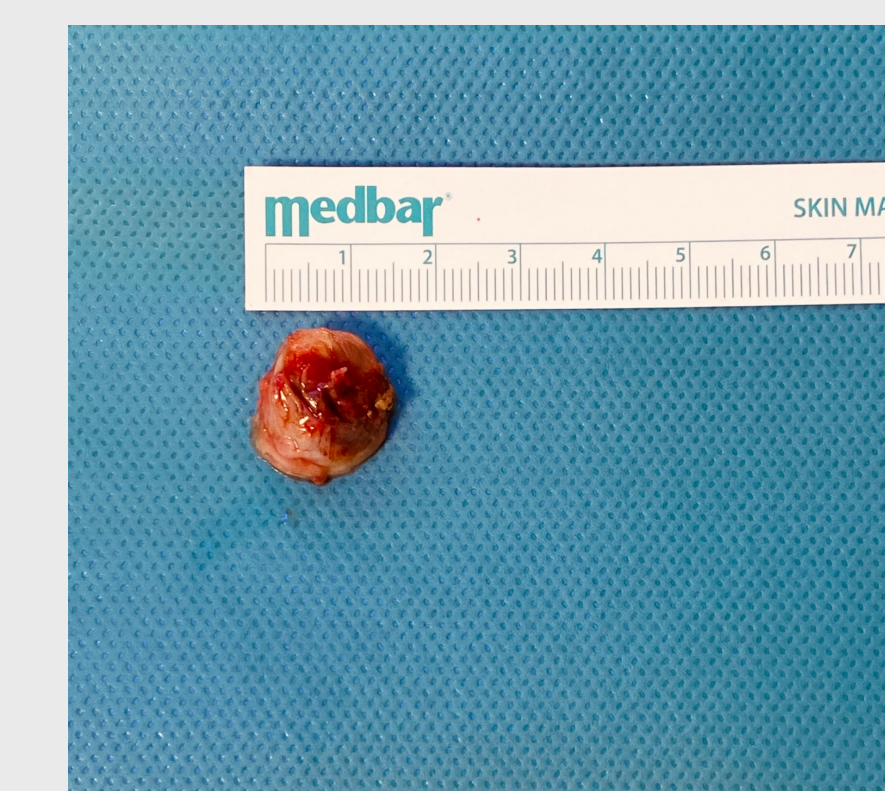


Figure 5



Figure 3