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Case Report

Surgery Section

Masson's Haemangioma Presenting as a Fibrolipoma

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ABSTRACT

Masson's haemangioma, also known as intra vascular papillary endothelial hyperplasia, is a rare benign condition which usually occurs due to traumatic vascular stasis. It is almost always associated with thrombus formation in the lumen of a vessel. Its significance lies in the fact that it can be easily misdiagnosed as a soft tissue sarcoma due to its clinical similarity to the same. Here, we present a case of Masson`s haemangioma in a 29-year-old male misinterpreted as fibrolipoma.

Keywords: Angiosarcoma, Masson's tumour, Haemangioendotheliome Vegetant Intravasculaire

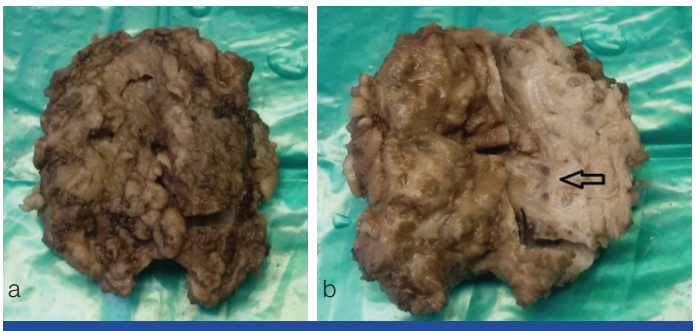
CASE REPORT

A 29-year-old male patient presented to the surgical outpatient department with the complaints of swelling over left scapular region noticed 4 months back. Patient complained of associated pain since a few days. There was gradual increase in the size of the swelling. There was no history of significant trauma. The patient did not have any other systemic complaints. Patient did not have any co-morbid conditions and no past surgical history or any significant habits.

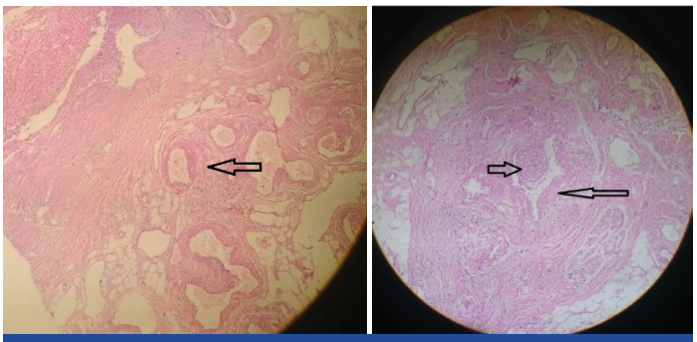
Local physical examination revealed a swelling over the back of size 5x5cm, about 5cm away from the midline and 3cm below the left scapular margin which was mildly tender, euthermic, soft in consistency with well defined margins and smooth surface and not adherent to overlying or underlying structures. There was no impulse on coughing. General physical examination and systemic examination was found to be normal. A provisional diagnosis of lipoma was made. Complete blood counts were found to be within normal limits.

Ultrasonography revealed a 5.5x4.5x2cm swelling in the subcutaneous plane in the left scapular region, not adherent to any surrounding structures, suggestive of a fibrolipoma.

Patient was taken for excision. A 6x5x2 cm irregular yellowish brown mass was found in the subcutaneous plane not adhered to any underlying muscle or bone or associated with any vessel or nerve [Table/Fig-1a]. There was no evidence of increased vascularity. Cut surface was yellowish in colour with haemorrhages at a few places [Table/Fig-1b]. Histology revealed fibrofatty tissue with numerous thick walled vascular channels on low resolution microscopy [Table/Fig-2]. Many vessels showed intra vascular papillary endothelial hyperplasia with thrombi formation in the vascular lumina. Some of the vessels showed fibrin thrombi in the core of the papilla [Table/Fig-3]. This was thus, diagnosed as Masson's haemangioma. Patient was followed-up for 4 months postoperative and was uneventful without any evidence of recurrence.



[Table/Fig-1]: (a) Gross specimen of the yellowish brown mass removed after excision. (b) Cut surface of the specimen showing haemorrhages at a few places.



[Table/Fig-2]: Low resolution image (4x, H & E stain) showing endothelial hyperplasia (black arrow). **[Table/Fig-3]:** High resolution image (40x, H & E stain) showing papillary projection (long arrow) with fibrin thrombus (short wide arrow) within.

DISCUSSION

Masson's haemangioma is considered as a reactive endothelial proliferation following traumatic vascular stasis [1]. It was initially described by Pierre Masson in 1923 in a haemorrhoidal plexus and was named then as "haemangioendotheliome vegetant intravasculaire" [2]. The lesion is almost exclusively intravascular with thickened vessel walls. Numerous papillary projections are present with organizing thrombi formation within it [3]. It highly resembles a soft tissue tumour, especially angiosarcoma but can be differentiated from it due to the lack of necrosis, fibrinous appearance and thrombus formation in the former [4]. Masson's haemangioma is a peculiar rare benign intravascular lesion, rather than a neoplasm [5]. It has been addressed by many names since the time it was first described in 1923 as Masson's tumour, Masson's haemangioma, Masson's intravascular haemangioendothelioma, Intravascular Papillary Endothelial Hyperplasia (IPEH) [6], or reactive papillary endothelial hyperplasia [7]. It has various sites of occurrence including the skull, thyroid, head and neck, breast, oral cavity [8], trunk [3] and extremities [4]. It can also occur in intra-abdominal organs such as liver, though rare [9]. IPEH is an unusual benign vascular lesion, comprising approximately 2% of the vascular tumours of the skin and subcutaneous tissue [10]. It is usually of three types a pure form which occurs in a dilated vessel; mixed form which occurs as a change in a vascular malformation and an undetermined form which has an extravascular origin [11].

There is no particular diagnostic test of choice. It is usually misinterpreted clinically and radiologically as a soft tissue tumour for which ultrasonography is an ideal initial investigation followed usually by a magnetic resonance imaging [12,13].

Histologically the following are required for definitive diagnosis of Masson`s haemangioma–

a) Endothelial proliferation within the vessel.

b) Multiple papillary projections.

c) Fibrin thrombus within.

d) No evidence of necrosis.

This helps in differentiating Masson`s haemangioma from the well-known angiosarcoma with which it is often confused with [14]. Other differentials for Masson's haemangioma include capillary haemangioma, cavernous haemangioma and Kaposi sarcoma [15].

The pathogenesis of the lesion is variable. It was said that endothelial proliferation lead to the thrombus formation. But later another theory was proposed saying the lesion developed in a pre-existing thrombus.

Treatment is complete surgical excision. It is rarely known to recur. It is a locally occurring lesion with no reports of metastasis [16].

CONCLUSION

Masson's haemangioma should thus be a differential in the mind of a surgeon while dealing with a soft tissue tumour due to its remarkable resemblance to the latter, although suspicion of this rare disorder would be difficult.

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