CASE REPORT

Intramuscular Haemangioma of The Triceps Muscle

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ABSTRACT

Intramuscular haemangioma are subset of vascular tumours of skeletal muscle. Haemangioma of the deep soft tissue are uncommon and more frequently present a diagnostic dilemma. Intramuscular haemangioma is most frequently located in the muscles of the lower extremities. We present a case of intramuscular haemangioma of triceps muscle of right arm in proximity to brachial vessels with compression on median nerve. Haemangioma ws successfully excised without any complication.

Key words *Intramuscular haemangioma, Vascular tumours, Triceps.*

INTRODUCTION:

Haemangiomas of the deep soft tissues are uncommon and more frequently present a diagnostic dilemma. Intramuscular haemangioma is probably the most common form of haemangioma of deep soft tissue, accounting for approximately 0.8% of all benign vascular tumours. It is most frequently located in the muscles of the lower extremities.[1] Patients usually present with a massive raised tumour with pain in 50 to 60% alongwith pressure symptoms. These are diagnosed by physical examination, plain radiographs, doppler ultrasound and MRI.[2,3] We present a case of intramuscular haemangioma of triceps muscle with neurological symptoms.

CASE REPORT:

A male patient of 40 years presented with a swelling on the medial aspect of the right arm for one year. The swelling gradually increased in size and the patient also developed numbness in the right forearm, thumb, index and middle fingers. On examination there was a 7cm x 6cm size swelling on the medial side of right arm. It was soft in consistency with lobulated surface and was compressible. The swelling had ill-defined margins and was not adherent to the overlying skin. The swelling decreased in size when patient asked to raise his arm above shoulder. On distal neurological examination there was sensory loss on the distal volar surface of forearm and numbness of right thumb, index and middle fingers.

The haematological and biochemical investigations were unremarkable. X ray of right arm showed no involvement and erosion of underlying bone. The doppler ultrasound of right upper limb showed an isolated mass of 7.5cm x 4.5cm between the muscle planes on medial side of right arm. The colour doppler showed rich blood flow in the mass which was present in close proximity to the brachial vessels. Magnetic resonance imaging showed a soft tissue intensity mass having flow voids within, isointense on T1W1 and hyperintense on T2WI, with marked post contrast enhancement and measuring 7.5cm x 4.5cm x 7.6 cm in the right arm medially. This lesion seemed to be arising from long and medial heads of triceps and coracobrachialis muscles. Mass encased and displaced the brachial artery and the median nerve. No axillary lymphadenopathy was noted. Imaging findings were suggestive of haemangioma (Fig.I a & b).

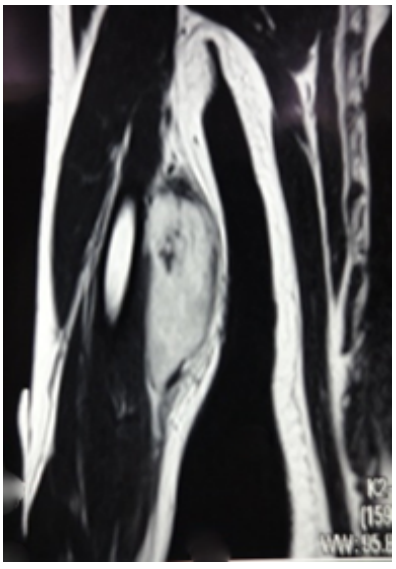

Fig. Ia: MRI right arm showing soft tissue swelling in relation to triceps muscle.

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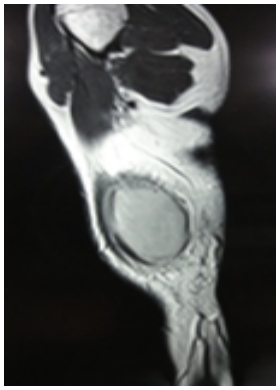

Fig. Ib: MRI right arm showing soft tissue swelling in relation to triceps muscle

The swelling was explored through an anteromedial upper arm longitudinal incision. The operative findings were a compressible mass deep to triceps muscles and attached to it. This was in close proximity to brachial vessels and median nerve. Both these structures were displaced and stretched on the lesion **(**Fig II). It was a vascular lesion that had multiple feeding vessels. All the feeders to haemangioma were ligated and the haemangioma was dissected out of the surrounding structures including the triceps muscle. Haemostasis was secured and the wound was closed and a suction drain placed. Post-operative progress of the patient was unremarkable. On histopathology mass contained fibro-collagenous tissues with vascular channels of variable sizes lined by endothelial cells with scanty intervening stroma. Findings were suggestive of haemangioma.

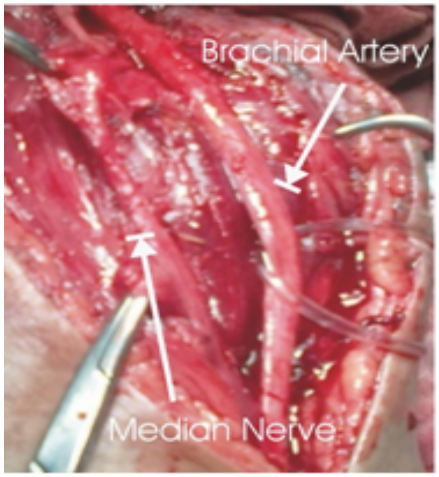

Fig. II Intraoperative view of soft tissue compressible and vascular swelling in relation to median nerve (right) and brachial vessel (left)

DISCUSSION:

The word haemangioma comes from the Latin words '*hemangio'* meaning blood vessel and '*oma'* meaning tumour with cell dividing activity. Haemangiomas differ from other vascular birthmarks in that they are biologically active; their growth is dependent on the growth of the child.[4] They are the most common benign tumour of infants. Haemangioma growth is referred to as hyperplasia, where as other vascular birthmarks growth is referred to as hypertrophy.[5,6]

Soft tissue arteriovenous haemangiomas are benign vascular hamartomas characterized by the presence of arteriovenous shunts. Few cases of soft tissue haemangiomas have been found in the literature, and these were frequently described as cutaneous lesions of the limb or of the scalp. There are reported cases of intramuscular haemangioma and haemangioma of antebrachial muscles in upper arm causing ulnar nerve compression.[7,8,9] and radial nerve compression. In our case median nerve was compressed by intramuscular haemangioma of triceps muscle. Vascular malformations are composed of dysplastic vessels, that are present at birth and enlarges in proportion to the growth of the child. They do not regress spontaneously.

Most haemangiomas are superficial lesions that have a predilection for the head and neck.[10] However, they may also involve deep soft tissue structures, such as the liver, skeletal muscles, synovial lining, and peripheral nerves. Haemangiomas of the deep soft tissue are uncommon and more frequently present a diagnostic dilemma. It occurs commonly in young adults of less than 30 years. It is most frequently located at the muscles of the lower extremities, especially the muscles of the thigh. The patient in present report was of middle age and had involvement of triceps muscle.

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