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GLOMANGIOMA OF THE ARM: A CASE REPORT

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ABSTRACT

Glomus tumor is one of the rare skin tumor with typical characteristics. Glomus tumors are relatively rare vascular tumors with reported incidence of 1.6% of all soft tissue tumors. Present case is a 52-year-old male who presented with a painful lesion over the right upper arm since six months. Initially patient took basic analyses followed by physiotherapy & orthopaedic consult, however there was no relief of pain. On ultrasound features were suggestive nodule or Lipoma. The patient underwent surgical excision with a histopathology confirming diagnosis of glomangioma. A brief case report & review of literature is presented.

KEY WORDS: Glomangioma, physiotherapy & orthopaedic.

INTRODUCTION

In India diagnosis of skin tumors might be difficult as they have no typical clinical characteristics. Glomus tumor is one of the rare skin tumors with typical characteristics. It should be considered in differential diagnosis of painful tumors. Glomangioma or glomus tumor is a rare, slow growing benign tumor of dermis or subcutaneous tissue. Glomus tumors are vascular tumors with reported incidence of 1.6% of all soft tissue tumors. [1] It originates from endomyoarterial corpuscles in the glomus body^[2] The commonest site is the hand, particularly the fingers. There have been reports in the literature of unusual location of glomus tumor such as ankle, [3] foot, [4] knee, [5] thigh [6] and hip. [7] Although extradigital localization of glomus tumor is rare, in atypical localizations it cannot be easily diagnosed thus sometimes causing a misdiagnosis. A soliltary glomus tumor is a pink or purple nodule with classic triad of pain, cold sensitivity and point tenderness. [8] Here we report a case of a Glomus tumour involving an unusual site.

CASE REPORT

A 52-years old male came to surgery OPD with a painful lesion over the right arm of six months duration. The lesion was initially of small size, later progressed to present size of around 1cm. There was no history of trauma. Patient had complaint of <u>a</u> shooting type of pain of mild to moderate degree. Initially patient took basic analgesics. Later he consulted an orthopaedician and <u>a</u> physiotherapist but still the patient was not relieved of pain after sessions of physiotherapy.

On examination a solitary nodule of size 1cm over lateral aspect of right arm near deltoid insertion was seen. On

palpation it was tender, mobile with no discharge from the overlying skin. There were no signs of inflammation or palpable local lymph nodes.

Ultrasonography (USG) of the local area was suggestive of a nodule with differential diagnosis of a lipoma or a fibroma or a neurolipoma. Patient was planned for an excision of the nodule under anesthesia. Nodule was marked pre-anesthesia. Patient underwent an excision under local anesthesia and sedation. Specimen removed was a nodule of size 1cmx1cm (Fig. 1) and sent for histopathology. Post operative course was uneventful and patient was completely pain free. Histopathological report showed uniform polygonal cells with round to ovoid nuclei and slightly eosinophilic cytoplasm suggestive of a Glomangioma (fig. 2 A&B). Follow up of 1 year has shown patient to be asymptomatic.

DISCUSSION

Glomus tumor is one of the rare skin tumors with typical characteristics. It is a slow growing benign tumor of dermis or subcutaneous tissue. Glomus tumors are relatively rare vascular tumors with a reported incidence of 1.6% of all soft tissue tumors. [1] It originates from endomyoarterial corpuscles in the glomus body [2] The commonest site is the hand, particularly the fingers. There have been reports in the literature of an unusual location of glomus tumor such as ankle, [3] foot, [4] knee, [5] thigh [6] and hip. [7] These tumors arise from the glomus body, which is responsible for thermoregulatory function and is composed of glomus cells, which are closely related to the smooth muscle cell. Nerve fibers are usually present in the glomus tumor but do not correlate with painful or nonpainful symptomatology. [1] A solitary glomus tumour is a pink or purple nodule with a classic

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triad of pain, cold sensitivity and point tenderness. Glomus tumors may be solitary or multiple; the latter may be further divided into regional or disseminated, which are usually familial or congenital. Other variants such as plaque type and patch type have been described.

A glomangioma is seen as a nonspecific, solid, hypoechoic mass in an ultrasonography and hypervascular in a color Doppler. Magnetic Resonance Imaging (MRI) is specific in subungual glomangioma and non specific in extradigital glomangioma. In the present case ultrasonography was performed which was suggestive of lipoma.

Histopatholgy is the gold standard investigation for such tumors. Histological subtypes are glomus tumor proper, glomangioma and glomangiomyoma. The main histological characteristic of glomangioma is that the glomus cell clusters are arranged around dilated venous vessels. Solid glomus tumors are composed of aggregates of glomus cells surrounding inconspicuous vessels. Glomus cells are round, regular with pale or eosinophilic cytoplasm and dark staining round to oval nuclei. Glomangiomas have more prominent vessels and less conspicuous glomus cells.

The surgical excision is the treatment of choice for solitary tumors, as in the present case excision was performed. Other treatment options for glomangiomas include sclerotherapy(sodium tetradecyl sulphate, polidocanol and hypertonic saline), gamma-knife, radiotherapy, lasers(Argon and Carbondioxide laser) and periodic observation of asymptomatic lesions. [10,11]

Present case posed difficulty in diagnosis and treatment due to rarity of these tumors & location. Present case became symptom free after surgical treatment. Hence correct clinical knowledge, examination and investigations with high degree of suspicion can help a clinician to reach the diagnosis early and reduce morbidity of the patient.



Figure. 1: Gross Speciemen of Excised Nodule.

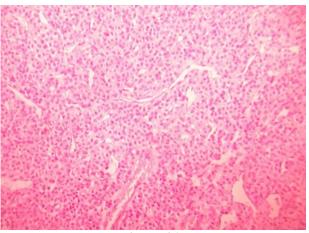


Figure. 2A.

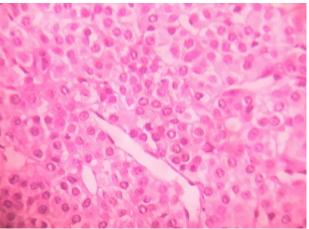


Figure. 2B.

Figure. 2 A & B. Uniform polygonal cells with round to ovoid nuclei and slightly eosinophilic cytoplasm (10x & 45x).

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