

Glomus Tumour – The Report of a Case in an Adult Nigerian

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ABSTRACT

Background: *Glomus tumour, a relatively common lesion in Caucasians is reported to be rare in blacks.*

Method: *A case of glomus tumour is reported in an adult male Nigerian to highlight its distinctive clinical presentation and the literature reviewed.*

Result: *A 60-year old man presented with a painful skin nodule on the ventral surface of his right forearm. The pain was far in excess of the size of the lesion. There was however no relief from previous medications. Following complete excision of the lesion, pain relief was dramatic. Histopathological examination of the lesion showed sheets of round to polyhedral glomus cells and elongated endothelium lined vascular channels diagnostic of glomus tumour.*

Conclusion: *Severe pain is a very important feature of glomus tumour of the skin. This is relieved by complete excision of the lesion.*

KEY WORDS: *Glomus tumour; Glomangioma; vascular tumours.*

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INTRODUCTION

Glomus tumours are relatively common vascular lesions usually seen in adults between the third and fourth decade of life¹. The lesions can occur in a wide variety of anatomic locations, but the hands, feet, forearms and legs are the most commonly affected sites especially as subungual nodules of the fingers^{2,3}. In its well recognized and more common form, glomus tumour presents as a solitary cutaneous or subcutaneous nodule that is characteristically associated with paroxysmal pain. Although relatively common in Caucasians, glomus tumour is rare in blacks. The first case was reported in the modern

literature in 1967 by Grave⁴. This is a report of our experience with management of the condition in a Nigerian patient.

CASE REPORT

A 60 year old male quantity surveyor presented to the Surgical Out-patient Clinic of Aminu Kano Teaching Hospital with a 3 year history of a small painful skin nodule on the volar surface of his right forearm proximal to the wrist joint. The pain was severe, lancinating in nature and radiated down his hand preventing him from carrying out his normal activities. Light touch seemed to aggravate the pain. He was previously placed on topical and oral analgesics and anti-depressants, none of which seemed to relieve his condition appreciably.

On examination, a small 1x 0.5cm dark subcutaneous nodule was found. It was exquisitely tender; hence attachment to skin could not be ascertained. The epitrochlear and axillary lymph nodes were not palpable.

The lesion was excised under local anaesthesia (field block) using 1% xylocaine with adrenaline. At surgery a small circumscribed subcutaneous blue-red lesion was identified connected proximally and distally to a vein. This was ligated at both ends and the lesion excised. The wound healed satisfactorily and the pain gradually disappeared.

Histopathological examination of the specimen showed a well-circumscribed lesion composed of sheets of uniform round to polyhedral glomus cells with ovoid nuclei set centrally in a pale eosinophilic cytoplasm. Elongated vascular channels were uniformly distributed between the tumour cells, each lined by a single layer of flat endothelial cells (Fig.1).

There has been no recurrence of the lesion or symptoms one year after excision.

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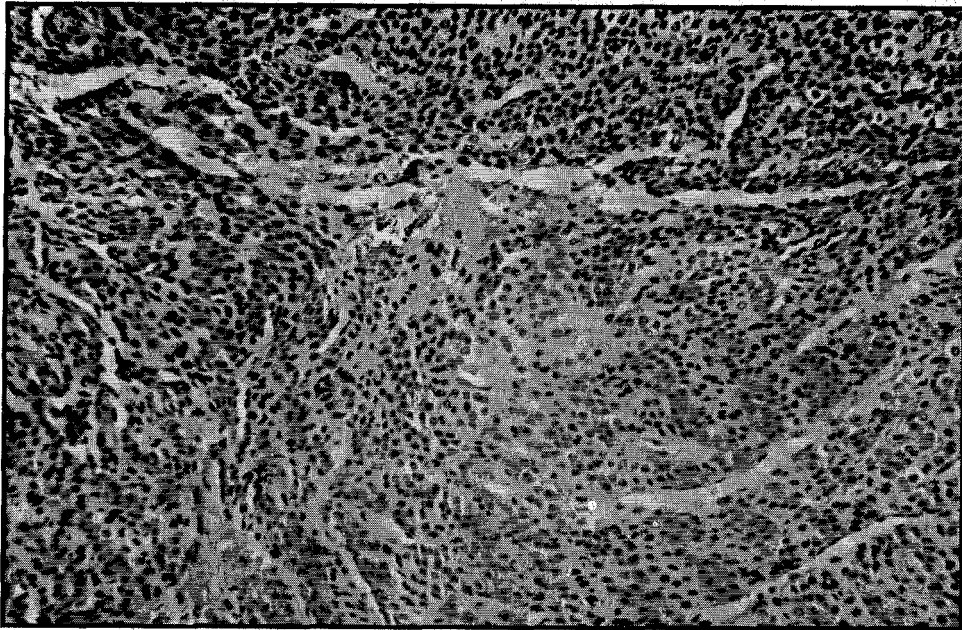


Fig 1. Glomus tumour showing sheets of glomus cells with central ovoid nuclei. Note elongated vascular channels distributed between tumour cells. H & E x 100.

DISCUSSION

Glomus tumours are biologically benign lesions which arise in the specialized vascular structures (glomus bodies) of the dermis and elsewhere concerned with control of blood flow and temperature regulation². They are thought to be derived from differentiation of pluripotent mesenchymal cells or from ordinary smooth muscle cells¹. With the exception of subungual glomus tumours which have a marked female predilection, glomus tumour do not generally demonstrate any gender predilection⁵. Infrequently the tumours are multiple usually appearing in children and relatively asymptomatic in nature, with autosomal dominant mode of inheritance⁶.

Various analysis of vascular tumours in Nigerians have shown glomus tumour to be a rare lesion^{7,8}. African patients also tend to present later in the fifth to seventh decades, with single cutaneous lesions and no associated family history^{4,7,8}. In view of its rarity, the diagnosis is often missed despite its distinctive clinical presentation of a painful lesion, the pain usually far in excess of the size of the lesion. The diagnosis is established based on the histopathological features of the lesion^{1,2,4}.

Curative treatment is by complete surgical excision. This is accompanied by dramatic relief of pain. Local recurrence is uncommon and when seen, it is associated with a rare variant, infiltrating glomus tumour⁹. This occurs in deep soft tissues, and malignant variants are extremely rare.

It is therefore important to consider glomus tumour in the differential diagnosis of painful cutaneous nodules. A high clinical index of suspicion and histopathologic examination of biopsy material are desirable to confirm the diagnosis.

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