Stony Hard Back Swelling-Diagnostic Dilemma

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Abstract

Subcutaneous back swellings like lipoma, neurofibroma and sebaceous cysts are common clinical entities. Swellings which are hard include calcified sebaceous cysts, calcinosis cutis and occasionally sarcomas.We present here a patient with a stony hard swelling over back with an unusual histopathological diagnosis.

Key Words: Pilomatricoma, giant, benign

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Introduction

Subcutaneous swelling is one of the common symptoms which bring the patient to the surgeon. They can occur anywhere over the body. The consistency of the swelling varies from very soft to very hard.

Some of the benign hard swellings include calcified sebaceous cyst, osteoma, calcinosis cutis, hydrocystoma, calcified lipoma, etc [1], whereas malignant hard swellings include carcinomas and sarcomas.

We hereby report a rare case of benign Giant stony hard subcutaneous swelling which we recently encountered.

Case Report

A 37-year-old male presented with a painless swelling over the left infrascapular region since 2 years, which had been gradually increasing in size. There was no discharge, fever or preceding trauma. There was no previous treatment for this problem.

On examination, a single swelling measuring 7x6 cm was found 8 cm below the inferior angle of the left scapula and 5cm lateral to midline. Swelling was oval, well defined with smooth surface. It was non-tender, mobile and stony hard in consistency. Swelling was subcutaneous in plane and was fixed to the skin. There was no punctum, discharge or regional lymphadenopathy. There were no similar swellings elsewhere in the body.

His routine investigations and dorsolumbar X-ray were normal.

A clinical diagnosis of calcified sebaceous cyst was made and surgery performed.

The swelling was excised totally under GA (Figure 1). The wound was closed primarily with suction drain in subcutaneous plane which was removed 24 hours later. Postoperative recovery was uneventful.

Histopathological examination (Figure 2) of the specimen showed nest of cells having moderate cytoplasm and basophilic granules with ghost outline of nuclei. There was also extensive calcification at the centre of nests and many foreign body giant cells were present. There was no caseation. Features consistent with "*PILOMATRICOMA*"

On follow-up for 2 months, patient had remained asymptomatic.

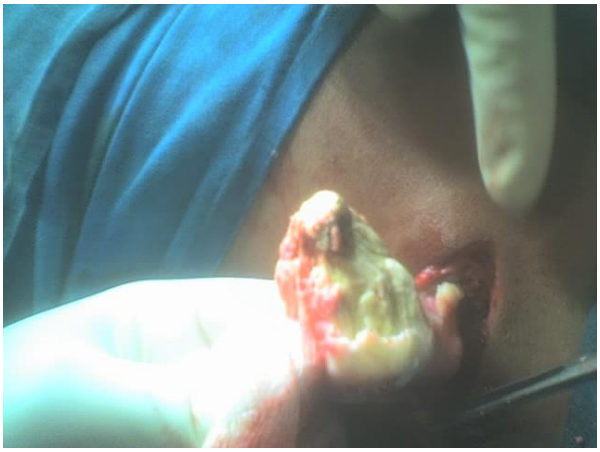

Figure 1. Showing swelling being excised totally.

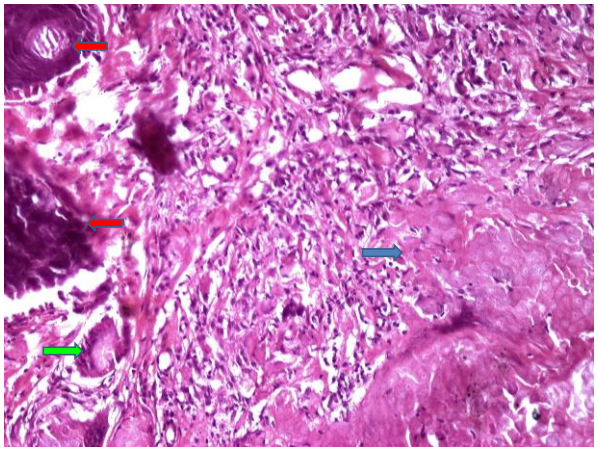

Figure 2. Nests of shadow cells (blue arrow) in the dermis with foci of calcification(red arrow) and a chronic inflammatory cell infiltrate in the intervening stroma with foreign body giant cells (green arrow).

Discussion

Pilomatricoma [2] is an uncommon benign tumour derived from hair matrix cells. It is also called as "*Calcifying Epithelioma Of Malherbe*" [3].

It is common in children with greatest incidence at 8-13 years of age [3]. However, it can also occur in adults [4] and on any hair bearing site of body. Most common site of pilomatricoma is over the head and neck accounting over 50% of cases [3,5], followed by the upper extremities, trunk and lower extremities [3].

They are usually solitary, painless and measure 5mm to few centimeters. However, giant pilomatricoma which is more that is more than 5 cm have been infrequently reported [5]. Clinical diagnosis of pilomatricoma is very difficult and 75-79% of time the diagnosis is incorrect at the time of initial consultation [6].

Pilomatricoma are calcified and have a rock hard consistency with "*Tent Sign*" due to attachment of tumour to over lying epidermis. The hardness is due to intracellular and stromal calcification found in about 70% of the cases [6].

Histologically [1,3], pilomatricoma is a deep subepidermal tumour consisting of irregular islands of epithelial cells. The cells in the islands are arranged in a circular configuration, with nucleated basaloid cells on the periphery and enucleated shadow cells in the centre. The ghost cells evolve from basaloid cells. Calcification is seen in the shadow cell regions. Foreign body giant cell inflammation can also be identified in regions where keratinized debris is abundant.

Multiple lesions are found in 2-3.5% of the reported cases [3,7] and are associated with Gardner's syndrome and Steinerts disease.

Pilomatricomas rarely undergoes malignant change to pilomatrical carcinoma [5,1]. The treatment of choice is complete surgical excision and recurrences rate is very low ranging from 0-3% [3,1].

Pilomatricomas are rare subcutaneous benign tumours and further Giant pilomatricoma are unusual [6]. To the best of our knowledge, giant pilomatricoma in adults over back has not been reported earlier.

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