

Pleomorphic lipoma: A diagnostic dilemma

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ABSTRACT

Pleomorphic lipoma is a rare entity. Histologically it is characterized by atypical, multinucleated giant cells and grossly as a well-circumscribed mass. A 52-year old woman presented with a painless slow growing mass on right posterior aspect of neck. The lump was excised and sent for histopathological examination which revealed the features of pleomorphic lipoma. Recognizing this entity is extremely important to avoid unnecessary radical surgery.

Key words: liposarcoma, pseudosarcomatous lesion, soft tissue neoplasm

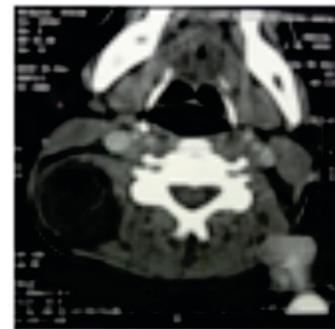
INTRODUCTION

Lipomas are considered the most common benign soft tissue neoplasms of the head and neck.^{1,2} There are many variants of lipomas, which are differentiated on the basis of the amount and type of mesenchymal elements present in it. One such variant is pleomorphic lipoma. This is a rare, benign, pseudosarcomatous, soft tissue neoplasm, which typically occurs in males (4:1) between the ages of 50 and 70 years.^{3,4} Its typical location is in the sub-cutis of the neck and shoulder. Currently there are fewer than 150 cases reported in the world literature.⁵ We report a rare case of pleomorphic lipoma.

CASE REPORT

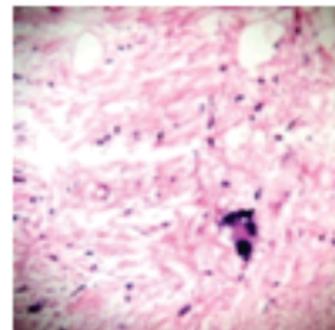
A 52-year old woman presented with a 3-year history of a painless slow growing mass on right posterior aspect of neck. Clinically the lump was mobile, non-tender, sub cutaneous mass measuring 8X5cm. There was no history of trauma at this site, also there was any cervical lymphadenopathy. Fine needle aspiration cytology (FNAC) was performed and a cytological diagnosis of spindle cell sarcoma was made. Computed tomography (CT) didn't show any evidence of invasion of surrounding tissue (Fig. 1).

Fig. 1. shows computed tomography of neck swelling



The excisional biopsy under anaesthesia was done and the specimen was sent for histopathological examination. Histopathology revealed the presence of mature fat cells, collagen fibres and floret like multinucleated giant cells and absence of lipoblasts (Fig. 2).

Fig.2. shows histopathological picture of the specimen



On immunohistochemistry stains were positive for CD34 and S100 while negative for cytokeratin, confirming the diagnosis of pleomorphic lipoma. Local excision to completely extirpate this neoplasm has proven

curative at 12 months of follow up.

DISCUSSION

Pleomorphic lipoma is an uncommon variant of lipoma, which microscopically may resemble a liposarcoma. The diagnosis of this rare lesion is difficult and should be considered in every growing mass of the head and neck region.⁵ Fine-needle aspiration has been reported as being effective in evaluating subcutaneous lesion especially in the head and neck region.⁵ However, pleomorphic lipoma can masquerade as a malignancy on fine-needle aspiration, therefore histological confirmation should be obtained prior to definitive therapy.^{6,7} Most lipomatous tumours of subcutis behave as benign neoplasms. However, occasional long standing lipomatous tumors can mimic malignancy in fine needle aspiration cytology.⁸ Pleomorphic lipoma is one such benign lesion of subcutaneous tissue that has to be sharply differentiated from sarcomas. Pleomorphic lipoma is an entity which must be added to the growing number of pseudosarcomatous lesions of soft tissue.⁸ Histopathologically mature adipose tissue with floret like giant cells, cells with pleomorphic nuclei and abundant vacuolated cytoplasm, ropy collagen and

absence of lipoblasts lead us to the diagnosis of pleomorphic lipoma. Kusum Kapila et al; reviewed 51 benign lipomatous tumours, out of which only one turned out to be atypical lipoma in their study.⁹ Clinically a long standing subcutaneous swelling in an elderly individual, radiologically well circumscribed lesion, absence of infiltration into adjacent tissue with no evidence of metastasis, should be confirmed by a cytopathologist for a diagnosis of pleomorphic lipoma. Therefore, careful examination of the clinical setting, as well as of the histopathological characteristics of this kind of tumors is essential for a correct diagnosis to avoid unnecessary and often disfiguring surgery.

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