

Case Report

Giant pleomorphic lipomatosis of upper back and axilla in an elderly female with genodermatosis – A rare case report and review of literature

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Abstract

Pleomorphic lipoma is a rare, benign, pseudosarcomatous, soft-tissue neoplasm that typically involves the subcutis of the posterior neck, upper back, and shoulders. Pleomorphic lipoma is a variant of spindle cell lipoma, and these two types of lipoma exhibit similar histological features and immunophenotypes. Rarely can it be cutaneous manifestation of a paraneoplastic syndrome. We report a case of long standing multiple lipomas in an elderly female with a rare genodermatosis (lamellar ichthyosis). Presentation was of a well-circumscribed subcutaneous mass. Associated functional limitation of the affected shoulder was seen. Complete surgical excision with acceptable cosmesis was achieved. Histopathology revealed pleomorphic lipoma.

Key words: Pleomorphic lipoma, Genodermatosis

1. Introduction

Lipomas are common soft tissue lesions. Spindle cell lipoma and pleomorphic lipoma represent a distinct entity grouped under the term “atypical lipoma”¹. Pleomorphic lipoma is a rare variant of lipoma. It is typically seen in men in the age group of 45-60 years and commonly arises in neck and shoulder region. Cytology shows admixture of atypical cells and multinucleated giant cells characterised by multiple, pleomorphic, hyperchromatic nuclei arranged in peripheral wreath like fashion with a dense cytoplasm. The diagnosis is often misleading towards malignancy².

This tumor is benign and treatment is complete excision. We report a 65 year old lady with genodermatosis and pleomorphic lipoma over the back and axilla treated with complete excision of the tumor.

2. Case Report

A 65 year old female presented with gradually increasing swelling over back since 15-20 years. No h/o pain or tenderness. No h/o restricted movements. Local examination showed a soft to firm nodular mass measuring 30X20cm over right upper back extending on to right arm with smooth surface in the subcutaneous plane. General examination revealed lamellar ichthyosis all over the body. Respiratory, cardiac and abdomen examination was normal. All routine blood investigations were done and normal. FNAC showed features of pleomorphic lipoma with focal areas of calcification. Excision of lipoma with primary closure was done.

Figure No.1 - Gross appearance of the pleomorphic lipoma



Figure No.2 - Genodermatosis over the bilateral forearm



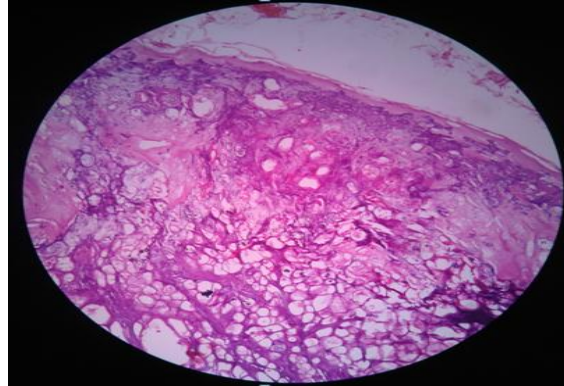
Figure No.3 - Specimen after excision



Figure No.4 - Postoperative image after primary closure



Figure No.5 - Microscopic picture of the specimen



3. Discussion

Pleomorphic lipoma is a rare variant of lipoma. It is a soft tissue tumor with few cases reported in literature³. It typically occurs in men beyond the fourth decade of life and has a predilection for superficial and subcutaneous areas of the neck and upper back³. Our patient was an elderly female with features of associated genodermatosis over face, neck and bilateral upper and lower limbs. Rare sites include tongue, bulbar conjunctiva, breast, parotid gland and retroperitoneum^{4,5,6,7,8}. Our patient had presentation over right upper arm and back and axilla.

Histologically these tumors have pleomorphic pattern characterised by intricate mixture of large atypical hyperchromatic cells including multinucleate forms (floret cells), ropey collagen bundles and mature fibroadipose tissue. These floret cells are large, bizarre cells with multiple hyperchromatic nuclei arranged in peripheral wreath like fashion. Cytology shows round to oval cells with hyperchromatic nuclei and scattered giant cells, which pose a diagnostic dilemma simulating malignancy.

The differential diagnosis of pleomorphic lipoma in cytology includes anaplastic carcinoma, sclerosing liposarcoma, malignant fibrous histiocytoma and pleomorphic liposarcoma³. Therefore, careful examination of the histopathological characteristics and immunophenotypes is essential for reaching a correct diagnosis, thereby avoiding unnecessary disfiguring surgery⁹.

4. Conclusion

Pleomorphic lipoma is rare but not an uncommon entity. Giant pleomorphic lipomas can be appropriately treated with complete surgical excision without radical or disfiguring surgery. However, proper preoperative planning of the incision and assessment of the flap closure is critical for a good functional and cosmetic outcome. Lastly, the association of pleomorphic lipomas with other genodermatoses and the possibility of malignancy should be kept in mind.

References

1. Enzinger FM, Weiss SW: Benign lipomatous tumors. In *Soft Tissue Tumors*. Third edition. St Louis, CV Mosby, 1994:399-401.
2. Mona Y, Anwar S, Raza, Timothy SG, Camilla JC: Fine needle aspiration of a pleomorphic lipoma of the head and neck: a case report. *Diagn. Cytopathol.* 2005; 32:110-13.
3. Ambawade VD, Gawai AR, Kate MS. Pleomorphic Lipoma- A Cytologic Diagnostic Dilemma. *National Journal of Laboratory Medicine* 2013 August, Vol 2(2): 18-20.
4. Guillou L, Dehou A, Charlin B, Madarnas P: Pleomorphic lipoma of tongue: case report and literature review. *J Otolaryngol.* 1986; 19:148-49.
5. Bryant J: Pleomorphic lipoma of bulbar conjunctiva. *Ann Ophthalmol.* 1987; 19:148-49.
6. Lopez- Rios F, Albert N, Perez-Barrios A, de Agustin PP. Aspiration biopsy of pleomorphic lipoma of the breast. A case report. *Acta Cytol.* 2000; 44:255-58.
7. Graham CT, Robert AH, Padel AF. Pleomorphic lipoma of the parotid gland. *J Laryngol Otol.* 1998; 112:202-03.
8. Scouzhu Z, Xinhau Y, Xumin L, Shulian L, Xianzhi W: Giant retroperitoneal pleomorphic lipoma. *Am J Surg Pathol.* 1987; 11:557-62.
9. Wang *et al.* A case of 'fat-free' pleomorphic lipoma occurring in the upper back and axilla simultaneously. *World Journal of Surgical Oncology* 2013 11:145.