CASE REPORT

A RARE CASE OF MULTIFOCAL ORIGIN OF DERMATO-FIBROSARCOMA PROTUBERANS DIAGNOSED ON CYTOLOGY

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ABSTRACT

Dermatofibrosarcoma protuberans (DFSP) is a relatively uncommon soft tissue neoplasm of cutaneous fibrous tissue with low to intermediate grade malignancy. Most of this tumour is focal origin; however the sequential occurrence of the two masses over breast and inguinal region in our case probably represents multifocal origin rather than metastases. To the best of our knowledge case of DFSP having multifocal origin as was our case, have rarely been documented in the literature.

Key-Words: Dermatofibrosarcoma Protuberns (DFSP); Mulifocal Origin; Cytology

Introduction

Dermatofibrosarcoma Protubernas is a slowly growing mesenchymal neoplasm of the dermis and subcutes with locally aggressive ,solitary, asymptomatic cutaneous nodule (measuring average 2.5 cm in size), more common in male and persons aged 30-40 years.[1-4] It has marked tendency to recur locally rarely metastasise to local and distant lymphnode.[2,3] It constitutes less than 0.1% of all cutaneous malignancy.[2] Most lesions occur on the trunk including chest, back and abdominal wall less on extremities.[2,4,5] We are presenting an unusual case; it was primarily presented on chest as breast mass and after one and year presented on thigh. Simultaneous occurrence of DFSP as well metastasis has been reported however multifocal origin after a span of one and half year has not yet been reported. So we are reporting a case of DFSP with multifocal origin on cytology.

Case Report

A 25 years female presented with thigh swelling measuring 2x2cms in size, soft, mobile and free from underlying structure. She was operated case of mastectomy for breast mass one and half year before and diagnosed as spindle cell neoplasm with variable cellularity and myxoid changes, feature are not that of phylloid tumour. Immunohistochemisrty was not done.

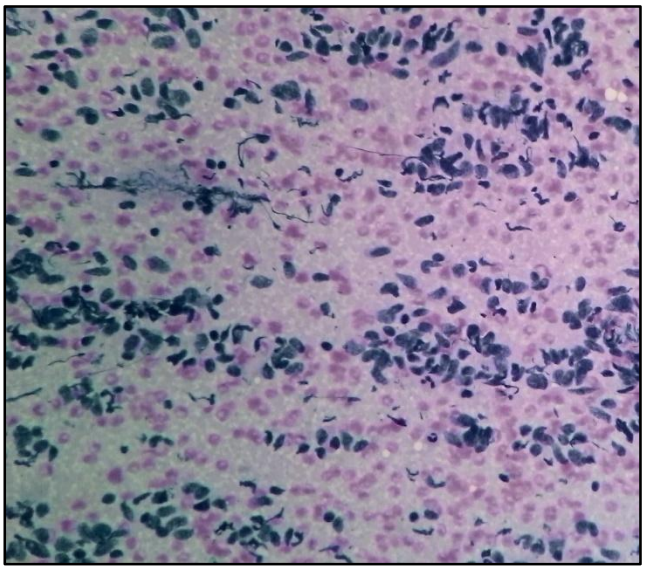

Figure-1: Spinde Cell Proliferation (MGG 40x)

On inguinal region aspiration has been done by 22 gouge needle, pale yellow sticky material aspirated and which was stain by PAP and MGG stain. On microscopy smears was highly cellular and show polymorphous cellular population, Cells are arranged in short fascicles, whorled pattern and scattered singly. There are bipolar spindle cells with moderate amount of cytoplasm. There are also plump spindle cells with blunted end and open chromatin, inconspicuous nucleoli and moderate amount of cytoplasm. Few cells show irregular nuclear membrane, open chromatin, scant cytoplasm and inconspicuous nucleoli. Mitosis and giant cells not appreciated. Plenty of fibromyxoid tissue is seen. Immunocytochemistry was done on aspirate slide. Tumour cells express

Immunoreactivity for CD-34 and immunonegative for CD-10,S-100 and Ki-67.Som it was labelled as DFSP.

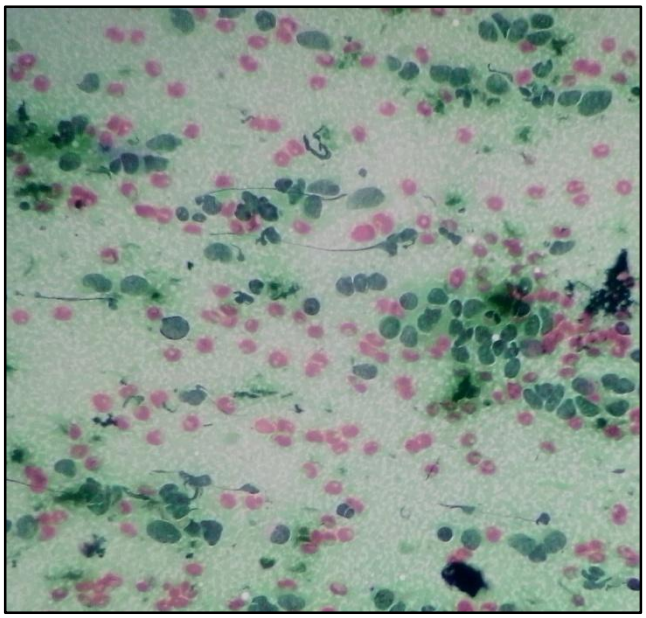

Figure-2: Bipoar Blunted End Spinde Cell Proliferation (PAP 40x)

Discussion

DFSP constitutes less than 1% of all cutaneous malignancy.[2] It is usually slowly growing over a span of years[1,2], usual 2, 5 cms in size and more common in male[1-3]. It can be seen in 6-65 years of age but most reported data is between 25-49 years of age.[4,5] Most lesions occur on the trunk including chest, back and abdominal wall, less common in extremities.[4,5] Patients of advance DFSP do not exhibit signs and symptoms of chronic wasting as it is observed in high grade aggressive soft tissue sarcoma.[4] DFSP has high rate of recurrence even after wide excision and distant as well as lymphnode metastasis is rare.[3-5] Very few cases are reported as multifocal DFSP.[4] in this much young female patient and over span of 1.5 years. It may be there in thigh when it was previously operated on chest. Patient might not have noticed as it is very small. When aspirated , as DFSP tissue appears as a single red to bluish, blanacable, firm, cutenoacious nodule, its surface enlarge by exanpile growth while the periphery of the tumour invades the adjacent skin and subcutaneous tissue.[2]

Conclusion

In summary, Multifocal DFSP is rare but can be diagnosed cytomorphologically as well as with help of Immunocytochemistry can help the clinician in proper management of patient.

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