

MALIGNANT PHYLLODES WITH LIPOSARCOMATOUS DIFFERENTIATION: A RARE CASE REPORT

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ABSTRACT

Sarcomas of breast are very rare accounting for less than 1% of breast malignancy.^[1] A 45 year-old woman presented with 6 month history of a palpable mass in right breast without axillary lymphadenopathy. Excision biopsy done which histologically showed malignant phyllodes with liposarcomatous differentiation. This case was reported for its rarity of liposarcomatous differentiation in malignant phyllodes tumour.

KEYWORDS: Malignant phyllodes, Liposarcoma.

INTRODUCTION

Phyllodes tumor of the breast is a biphasic fibro epithelial neoplasm, which can range from benign to malignant and can have various heterologous elements which are very rarely encountered^[2], usually occurs with malignant phyllodes tumor. Heterologous differentiation commonly resembles well-differentiated or pleomorphic liposarcoma.^[3]

CASE REPORT

45 year old married women, Last child birth 14 years back presented with swelling in the right breast since 6 months with progressive increase in size. No history of pain /nipple discharge / lymphadenopathy present. Swelling was clinically diagnosed as fibroadenoma. Excision biopsy was done and sent for histopathology.

GROSS: Received multiple irregular fragments of fibrofatty tissue measuring 9x6x4 cm in aggregate.

Largest fragment measuring 8x4.5x2.5 cm. C/S-lobulated, grey white, firm.

MICROSCOPY: Section shows breast parenchyma consisting of elongated and dilated ducts surrounded by stromal overgrowth composed of polygonal to spindle shaped tumor cells having moderate to marked pleomorphism with increased mitosis (21/10hpf). Some places show leaf like pattern with stromal hypercellularity. Stroma also shows lipoblasts which infiltrate into surrounding tissue.

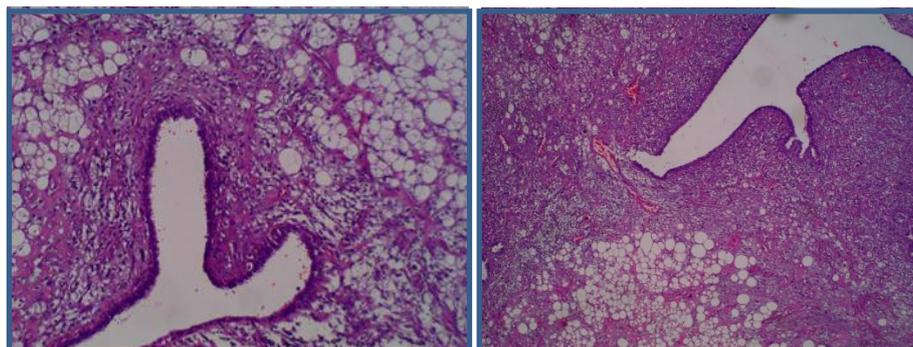


Fig 1a, 1b: Section shows breast parenchyma with elongated and dilated ducts with stromal overgrowth and stromal hypercellularity. (LP).

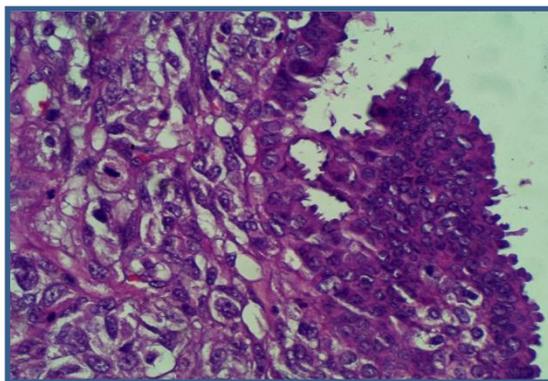


Fig 2: Section shows stromal overgrowth and stromal pleomorphism (HP)

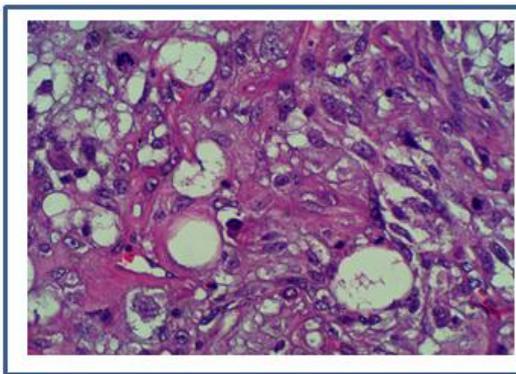


Fig 3: Section shows stromal overgrowth with mitotic figures. (HP)

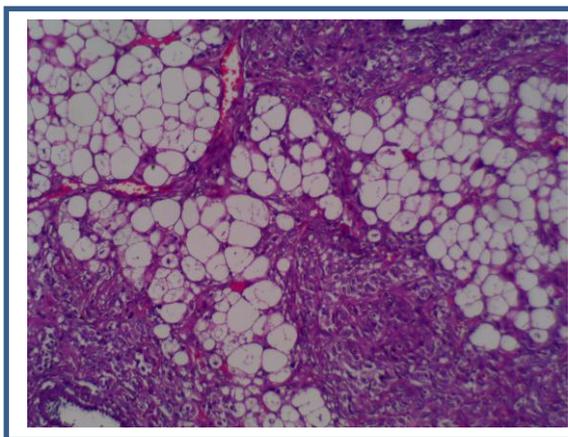


Fig 4: Section shows stroma with lipoblasts and adipocytes of varying sizes(LP)

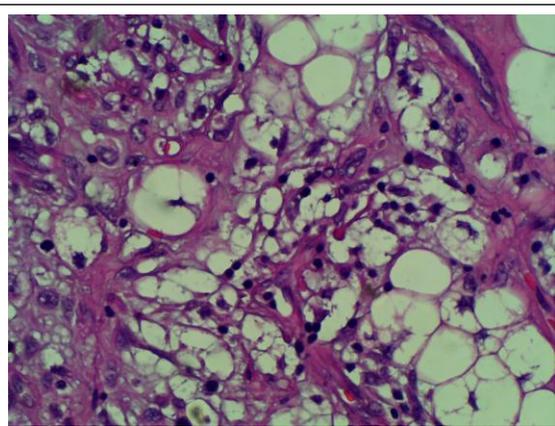


Fig 5: Section shows lipoblasts within the hypercellular stroma.

DISCUSSION

Phyllodes tumors of the breast are fibroepithelial neoplasms that can recur and metastasize. It can be graded into benign, borderline, and malignant categories based on a pattern of histological characteristics which include the degree of stromal hypercellularity, mitotic activity stromal cytologic atypia, stromal overgrowth, and circumscribed vs. invasive margins.^[4]

It occurs predominantly in middle-aged women (40-50 years) but can also occur in young adults or even in adolescents.^[5] In Asian women; the incidence of phyllodes is 6.92%, as compared to the western population, where the incidence is 0.3 to 1.5%.^[6]

Stromal changes include adipose and chondromyxoid elements and were seen in benign and borderline Phyllodes tumor, whereas malignant heterologous elements were reported in malignant Phyllodes tumors. Which was most commonly seen in the form of liposarcomatous differentiation.^[7,8]

Sarcomatous stromal elements, including angiosarcoma, chondrosarcoma, leiomyosarcoma, osteosarcoma, and rhabdomyosarcoma, are rarely encountered in malignant

phyllodes tumors. The presence of malignant heterologous element places the tumor into malignant category.^[9,10]

In the largest series of PTs reported by Tan P et al, stromal metaplasia was present in only 11 of 335 cases, and malignant transformation of epithelium in the form of DCIS and LCIS was seen in only two cases.^[9]

CONCLUSION

Malignant phyllodes with liposarcomatous differentiation is an very aggressive tumor with early recurrence and distant metastasis which needs close monitoring.

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