Case Report

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Phyllodes tumor presented as fungating mass on right breast and fibroadenoma on contralateral breast: a case report

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ABSTRACT

This is an article reporting a large phyllodes tumor with fibroadenoma. A 25 years female presented with a fungating mass of size 20×15 cms in right breast since last 1 year and amass of size 3×3 cms in left breast since 6 month. Biopsy from right side and left side breast mass proven to be Cystosarcomaphyllodes and fibroadenoma respectively. Wide local excision with 1cm normal tumor margin on right side and excision of mass on left side done. Proliferative markers like Ki-67 and P53 were in range of 1-2% and 3-4% respectively. Histopathological diagnosis of tumor was borderline phyllodes tumor (right side) and fibroadenoma (left side). Patient had an uneventful post-operative course and is presently on three monthly follow up since 1 year.

Keywords: Fibroadenoma, Phyllodes tumor, Fungating mass

INTRODUCTION

The phyllodes tumor, originally described by Johannes Muller in 1838, has presented a diagnostic and treatment dilemma for physicians since its original description. Classically, the name cystosarcomaphyllodes was assigned because of the tumor's fleshy appearance and tendency to contain macroscopic cyst. The term however, is a misnomer, as these tumors are usually benign and originating from intralobularstroma. Phyllodes tumor is the currently accepted nomenclature according to world health organization.¹

Phyllodes tumors are biphasic fibro-epithelial neoplasms of breast.¹ Tumor of mixed connective and epithelial tissues, which are generally classified as benign, borderline, and malignant based on histologic features.² Borderline tumors have great potential for local recurrence. They make upto 0.3 to 0.5% of female breast tumors and occurring mostly after age of 40 years.

Phyllodes tumors are distinguished from the more common fibroadenoma on the basis of cellularity, mitotic rate, nuclear pleomorphism, stromal overgrowth, and infiltrating borders. Benign plyllodes tumors are differentiated from fibroadenoma by the presence of whorled stroma forming larger clefts lined by epithelium that resembles clusters of leaf like structures. The stroma is more cellular than in a fibroadenoma, but the fibroblast is cells are bland, and mitosis are infrequent. Malignant phyllodes tumors are characterized by features such as stromal overgrowth, cellular atypia, and high number of mitoses.² On mammography it looks as round densities with smooth borders like fibroadenoma. Excisional biopsy is superior than cytologic analysis and core biopsy is confirming a diagnosis.

Phyllodes tumors are sharply demarcated from surrounding tissues which is compressed and distorted. Connective tissue composes of the bulk of the tumor which have mixed gelatinous, solid and cystic areas. Most malignant phyllodes tumors contain liposarcomatous / rhabdomyosarcomatous elements rather than fibrosarcomatous components. The arbitrary cut off point for designation as a giant phyllodes tumor is 10 cms.3 Tumors are excised with a margin of normal tissues i.e. usually wide local excision of tumor with 1cm breast margin may suffice as the treatment, but when tumor is large enough with respect to breast, then total mastectomy is required.1 If margin is negative following mastectomy radiotheraphy is not required. Radiotheraphy may have a role in the treatment of phyllodes tumor depending on the number of recurrences, mitotic index, bulky tumors, positive tumor margin, P53 and Ki-67 expression. Regional lymphnode dissection is not required as metastatic spread by hematogenous route. Optimal palliative treatment for metastatic tumor is yet to determine.

CASE REPORT

A 25 years female presented to outpatient department with chief complains of a lump in right breast since last one year and a mass in left breast since last 6 months.

On clinical examination, right breast was hugely enlarged with altered contour, irregular bosselated surface, multinodular with fungating growth of size 20×15 cms, surrounding skin was tender, swollen and red, enlarged nipple areolar complex, absence of bilateral lymph node enlargement, the breast was large enough to cause scoliotic changes in thorasic spine. FNAC report from the lump proved to be cystosarcomaphyllodes. Left breast mass was located on upper outer quadrant which was mobile, nontender. FNAC report from the mass showed with an impression of fibroadenoma. Wide local excision with 1cm tumor free margin done on right breast and enucleation of mass done on left breast. Both excised specimens are sent for histopathology.



Figure 1: A large fungating phyllodes tumor evident in the right breast and a fibroadenoma in the left breast

Microscopically (right breast specimen), the lesion was borderline plyllodes tumor with moderate pleomorphism and 3-4 mitoses per ten high power field with focal areas showing 6-8 mitoses per ten high power field. Areas of myxoid degeneration were present without any lymphovascular invasion. Proliferation markers like Ki-67 and P53 were in the range of 1-2% and 3-4% respectively. Patient had an uneventful post-operative course and is presently on 3 months follow up for one year.

DISCUSSION

Phyllodes tumor on right breast having architectural destruction with compression necrosis of overlying skin resulting in rupture of breast and fungating mass. Fungating breast mass are more commonly seen in invasive ductal carcinoma having another feature of skin infiltration with everted edges. On the other hand, phyllodes tumor having feature of an exophytic mass that pushes the skin borders outward, causing skin loss due to pressure necrosis. Local recurrence rates following surgical removal with tumor margin >1 cm are 4.3% for benign tumors and 12.8% for other varities.⁵ 5 years survival rates following surgical removal are 96%, 74%, 66% for benign, borderline and malignant verities respectively.⁵ Though surgery has been an inseparable part in management of phyllodes tumor ever since they were first described, due to rarity of conditions there has been no fixed protocol in the optimal management of the disease. Patients with malignant pathologic features, stromal overgrowth most closely correlates with mortality.4

CONCLUSION

There is a scant literature regarding a fungating, large phyllodes tumor in one breast and a fibroadenoma in the another. We report this case hoping to expand the literature and advice on management.

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