ORIGINAL RESEARCH PAPER

Medical Science

HUGE PHYLLOXERA TUMOUR OF RIGHT BREAST OPERATED IN STANLEY MEDICAL COLLEGE

KEY WORDS:

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INTRODUCTION

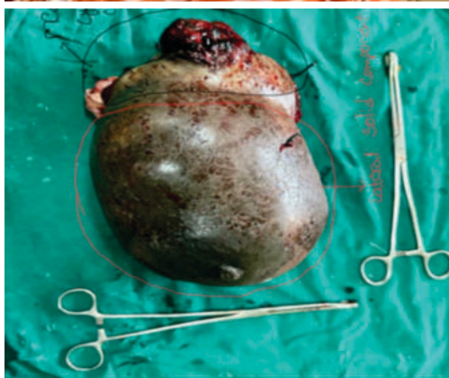
Phyllodes tumors are rare fibroepithelial lesions. They make up 0.3 to 0.5% of female breast tumors and have an incidence of about 2.1 per million, the peak of which occurs in women aged 45 to 49 years . The tumor is rarely found in adolescents and the elderly. They have been described as early as 1774, as a giant type of fibroadenoma . Chelius in 1827 first described this tumor. Johannes Muller (1838) was the first person to use the term cystosarcoma phyllodes. It was believed to be benign until 1943, when Cooper and Ackerman reported on the malignant biological potential of malignant according to the features such as tumor margins, stromal overgrowth, tumor necrosis, cellular atypia, and number of mitosis per high power field. The majority of phyllodes tumors have been described as benign (35% to 64%), with the remainder divided between the borderline and malignant subtypes. The term phyllodes tumor represents a broad range of fibroepithelial diseases and presence of an epithelial component with stromal components differentiates the phyllodes tumor from other stromal sarcomas.

Accurate preoperative pathological diagnosis allows correct surgical planning and avoidance of reoperation, either to achieve wider excision or for subsequent tumor recurrence . At one extreme, malignant phyllodes tumors, if inadequately treated, have a propensity for rapid growth and metastatic spread. In contrast, benign phyllodes tumors on clinical, radiological, and cytological examination are often indistinguishable from fibroadenomas and can be cured by local surgery. With the nonoperative management of fibroadenomas widely adopted, the importance of phyllodes tumors today lies in the need to differentiate them from other benign breast lesions. Treatment can be either wide local excision or mastectomy provided histologically clear specimen margins are ensured .

A 39 year old female came to Stanley medical college surgery opd with complaints of lump in right breast since one and half year, which is insidious in onset progressive in nature. Associated with pain over right breast. No history of nipple discharge, loss of weight or appetite. No history of lumps in ipsilateral or contralateral axilla. No history of breast tumours in family. On examination of right breast there is a lump measuring 15x15cm occupying entire right breast with irregular surface . Well defined margins. Skin over the lump and nipple areolar complex normal. Dilated veins seen over right breast. On palpation No warmth or tenderness over right breast lump. Irregular surface with well defined margins. mobile in all directions with variable consistency . No nipple discharge. Examination of ipsilateral axilla shows a single mobile non tender lymph node measuring 1x1 cm firm in consistency. No lymph nodes palpable on contralateral axilla.

Clinical Picture

Usg right breast shows a well defined hetroechoic mass measuring 15 x 15 cm with internal cystic components and solid components. Vascularity present within the solid components. Left breast normal study. Usg right axilla showed few oval shape hypoechoic enlarged lymph nodes with preserved fatty hilum largest measuring 13x24 mm with exccentric cortical thickening measuring 1cm. Left axilla normal study. Incision biopsy of breast lump done . HPE report says benign phyllodes tumour right breast. Ki67-3-4%. Simple mastectomy done and proceeded with flap closure. Specimen measures 3250 grams with with solid component in outer upper and lower quadrant involving central quadrant too and cystic component in inner upper and lower quadrant



Excised tumour

POST OP HPE

[illegible]	AGE:39 YEARS
	SEX:FEMALE
NATURE OF SPECIMEN:SIMPLE MASTECTOMY SPECIMEN	UNIT: S 1 CLINICAL DIAGNOSIS:PHYLLOIDES TUMOR-RIGHT BREAST
RECEIVED ON: 13/1/2024 GROSSING DONE ON :14/01/2024 REPORTED ON :20/01/2024	OP/IP :23125990 METHODOLOGY : H&E
GROSSING DONE BY : ASSISTANT PROFESSOR – DR PUNITHAVATHY POST GRADUATE – DR AMUTHA	STATUS OF REPORT : FINAL ASSOCIATE PROFESSOR: DR.SATHYALAKSHMI ASSISTANT PROFESSOR: DR.PUNITHAVATHY DR. SARAVANAKUMAR

MACROSCOPIC DESCRIPTION :

Received simple mastectomy specimen measuring 24x17x10cm, attached skin with nipple areola complex measuring 22x15cm. External surface-skin shows ulceration at medial side measuring 6x5cm. Cut surface shows an encapsulated tumor measuring 23.5x16.5x9.5cm with bulging borders, multilobulated, grey tan-grey white. Cut surface of tumor shows multiple scattered yellowish areas. Cut surface of nipple areola complex- no abnormality detected. Tumor is 0.5cm from superior margin,0.5cm from inferior margin, 0.3cm from lateral margin, 0.3cm from medial margin, 0.2cm from deep margin, 1cm deep to nipple areola complex.

MICROSCOPIC DESCRIPTION:

Sec[illegible] shows malignant neoplasm composed of tumor cells ar[illegible]h increased stroma cellularity. The tumor shows stromal over[illegible]s are spindle shaped with moderate amount of eosinophilic cytoplasm and pleomorphic hyperchromatic nuclei with marked atypia. Mitotic activity more than 15/10 HPF. Also seen are chondroid and osteoid like areas admixed with areas of extensive necrosis. Few scattered congested blood vessels seen. Section studied from ulcerated area in skin shows infiltration by tumor.

Section studied from superior, inferior, medial, lateral and deep resected margin free from tumor infiltration. Closest margin 0.2cm-deep margin.
Section studied from nipple areola complex free from tumor infiltration.

IMPRESSION: RIGHT BREAST-MALIGNANT PHYLLODES TUMOR
ALL RESECTED MARGIN (SUPERIOR, INFERIOR, MEDIAL, LATERAL, DEEP MARGIN), NIPPLE AREOLA COMPLEX- FREE FROM TUMOR INFILTRATION.
IHC:
CD34- DIFFUSE STRONG POSITIVE
ER-NEGATIVE
P63-NEGATIVE
KI67-60-70%

CAP PROTOCOL:
1.PROCEDURE- SIMPLE MASTECTOMY
2.SPECIMEN LATERALITY- RIGHT BREAST
3.TUMOR SITE- ALL QUADRANTS
4.TUMOR SIZE-23.5x16.5x9.5cm.
5.HISTOLOGICAL TYPE- PHYLLODES TUMOR, MALIGNANT
6.STROMAL CELLULARITY-MARKED
7.STROMAL ATYPIA- MARKED
8.STROMAL OVERGROWTH-PRESENT
9.MITOTIC RATE- MORE THAN 15/10 HPF
10.HISTOLOGICAL TUMOR BORDER- INFILTRATIVE
11. MARGIN- SUPERIOR, INFERIOR, MEDIAL, LATERAL AND DEEP RESECTED MARGIN FREE FROM TUMOR INFILTRATION, CLOSEST MARGIN-DEEP MARGIN (0.2CM)
12. REGIONAL LYMPHNODES-NOT SUBMITTED
13.PATHOLOGICAL STAGE CLASSIFICATION-pT4Nx
DATE :23/1/2024

SIGNATURE SENIOR RESIDENT
SIGNATURE ASSISTANT PROFESSOR
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END OF REPORT
Page 1 of 1

DISCUSSION

Phyllodes tumors are tumours of mixed connective tissue and epithelium constitute an important group of unusual primary breast tumors. On one end of the spectrum are benign fibroadenomas which are characterized by a proliferation of connective tissue and a variable component of ductal elements that may appear compressed by the swirls of fibroblastic growth. Clinically more challenging are phyllodes tumors, which contain a biphasic proliferation of stroma and mammary epithelium. First called cystosarcoma phyllodes, these tumors are now called phyllodes tumors in recognition of their usu- ally benign course. However, with increasing cellularity, an invasive margin, and sarcomatous appearance, these tumors may be classi- fied as malignant phyllodes tumors. Benign phyllodes tumors are firm lobulated masses that can range in size, with an average size of approximately 5 cm (larger than average fibroadenomas). His- tologically, benign phyllodes tumors are similar to fibroadenomas, but the whorled stroma forms larger clefts lined by epithelium that resemble clusters of leaf-like structures. The stroma is more cellular than in a fibroadenoma, but the fibroblastic cells are bland, and mitoses are infrequent.

Phyllodes tumors are seen on mammography as round densi- ties with smooth borders and are indistinguishable from fibroad- enomas. Ultrasonography may reveal a discrete structure with cys- tic spaces. The diagnosis is suggested by the larger size, history of rapid growth, and occurrence in older patients. Cytologic analysis is unreliable in differentiating a low-grade phyllodes tumor from a fibroadenoma. CNB is preferred, although it is difficult to classify phyllodes tumors with benign or intermediate malignant poten- tial on the basis of a limited sampling. The final diagnosis is best made by excisional biopsy followed by careful pathologic review.

Local excision of a benign phyllodes tumor, similar to local excision of a fibroadenoma, is curative. Intermediate tumors, also called borderline phyllodes tumors, are tumors to which it is difficult to assign a benign classification. These tumors are treated by exci- sion with negative margins (often suggested to be at least 1 cm) to prevent local recurrence. Affected patients are at some risk for local recurrence, most often within the first 2 years after excision. Close follow-up with examination and imaging allows early detec- tion of recurrence.

At the other end of the spectrum of tumors of mixed connective tissue and epithelium are frankly malignant stromal sarcomas. Malignant phyllodes tumors are characterized by features such as cellular atypia, high number of mitoses, and stromal overgrowth, the extent of which is the main predictor of survival. These tumors are treated similarly to soft tissue sarcomas that occur on the trunk or extremities. Complete surgical excision of the entire tumor with a margin of normal tissue is advised. When the tumor is large with respect to the size of the breast, total mastectomy may be required. If mastectomy is performed and the margins are negative, radiation therapy is not recommended. If the margins are concerning or close, if the tumor involves the fascia or chest wall, or if the tumor is very large (>5 cm), irradiation of the chest wall is considered. If only wide local excision is performed, adjuvant radiation therapy is recommended. As with other soft tis- sue sarcomas, regional lymph node dissection is not required for staging or locoregional control. Metastases from malignant phyllodes tumors occur via hematogenous spread; common sites of metastasis include lung, bone, abdominal viscera, and mediasti- num. Systemic therapeutic agents used for sarcomas have resulted in minimal success.

CONCLUSION

Phyllodes tumor bears specific clinical characteristic and can be considered as a differential diagnosis for the breast lumps. The preoperative diagnosis and proper management are crucial in phyllodes tumor because of their tendency to recur and malignant potential in some of these tumors.

REFERENCES

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