

Phyllodes Tumour of Breast: BSMMU Experience

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Summary:

This study was done in Banghabandu Sheikh Mujib Medical University, Dhaka, Bangladesh from January 2000 to December 2003 to see the presentation, different options of management - & outcome of treatment. Total 11 Patients of Phylloides Tumour were included in the study. Most Patients (55%) were above the age of 51 Years & well circumscribed non-tender firm mobile breast lump was the commonest (55%) presentation. 73% Patients were

treated by wide local excision & 18% needed mastectomy. About 18% cases had recurrence after 15 months follow-up. Any large painless mobile breast tumour of rapid onset should raise the suspicion of phyllodes tumour. Benign tumour can be treated by wide local excisions, simple mastectomy is the standard treatment for malignant lesion.

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Introduction

Phyllodes tumour is a rare fibro epithelial neoplasm of the breast, usually benign and rarely malignant (1%)¹. It has a sharply demarcated, smooth texture and is typically freely movable, relatively large tumour and comprises less than 1% of breast neoplasm². It may distort the breast, produce bulge in the skin surface, and even cause pressure necrosis of the overlying skin to appear as an irregular mass. The most ominous change is the appearance of increased stromal cellularity, anaplasia, and high mitotic activity³. Finding similar to fibro adenoma - mobile masses with distinct border, generally present as larger masses with rapid growth⁴. It is a rare biphasic tumour was described first by Johannes Muller in 1938^{4,5,6}. The incidence of phyllodes tumour is high in the 5th decade^{7,8}.

Materials and Method

This study included 11 patients of phyllodes tumour in Banghabandu Sheikh Mujib Medical University, Dhaka, Bangladesh, from January 2000 to December 2003. Diagnosis was done by clinical history,

examination and FNAC and histopathological examination. After confirmation of the diagnosis all patients were treated by surgery.

Results:

In this study six patients typically presented with firm mobile well circumscribed non-tender breast lump. Two patients had ulceration to the nipple and areola. Two patients presented with larger masses with rapid growth involving whole of breast (table-2). Involvement of axillary lymph node is rare, but in our study one patient had large breast lump with enlarged axillary lymph node.¹ Breast lump was firm to hard and non tender, lymph node was mobile non tender and firm in consistency.

In our study population mammography, USG, FNAC and histopathology done in all patients. Mammography revealed high-density mass in all patients.² USG revealed cystic area in seven patients, four patients had lobulated shaped mass with marked posterior acoustic enhancement. (table-3)

FNAC shows large epithelial clusters with a folded or wavy shaped indicating benign phyllodes tumour. These are the characteristic features of phyllodes pattern of its histology.¹⁰

Ten patients histologically had benign phyllodes tumour, one patient was malignant phyllodes tumour.

Out of eleven, eight patients were treated by wide local excision, two patients needed simple mastectomy. One patient had breast lump with

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axillary lymph node enlargement, FNAC showed malignant phyllodes tumour needed simple mastectomy with axillary clearance. (Table-4)

Results:**Table-I**

<i>Age of the Study Population (n = 11)</i>		
Age	No.	%
< 30yrs	2	18%
31 - 50 yrs	3	27%
51 yrs and above	6	55%

Table-II

<i>Presentation of study population: (n=11)</i>		
Breast lump	6	55%
Ulcerated nipple and areola	2	18%
Whole breast become lump	2	18%
Enlarge breast with axillary L.N	1	9%

Table-III

<i>Investigation reports</i>		
	Total Number	Results
Mammography	11	High density mass
USG	11	7 -mass, cystic area 4 lobulated
FNAC	11	3- PHYLLODES 8- Fibroadenoma
HISTHOPATHOLOGY	11	10-PHYLLODES (BENIGN) 1- PHYLLODES (MALIGNANT)

Table-IV

<i>Type of operation (n=11)</i>		
Wide local excision	8	73%
Mastectomy	2	18%
Mastectomy with axillary clearance	1	9%

Table-V

<i>Postoperative treatment offered</i>	
Radiotherapy	Not given
Chemotherapy	Done

Table-VI

<i>Follow up - 15 months two patients had recurrence</i>	
1 - Benign	8 - month later
1 - malignant	12 - month later

Discussion:

Phyllodes tumour is a biphasic tumour with an unpredictable behavior¹¹. It can occur at any age, median age is fifth decade. In our study two patients less than 30 years, three patients 31 - 50 yrs. and six patients above 51 yrs. Patients with phyllodes tumour typically present with a short history of large painless mobile breast lump^{4, 6, 8} and also presented ulceration in areola and rarely enlarged axillary lymph node. In our study maximum patients (40%) presented with breast lump, two patients with ulceration and two large masses in breast and one patient presented with enlarged axillary lymph node.

In FNAC, eight patients diagnosed as fibroadenoma and three patients as phyllodes tumour. The diagnosis of phyllodes is best achieved by histological examination of the specimen using either core or excisional biopsy¹². Frozen section examination is reliable in the diagnosis of phyllodes, however it is less precise in determining malignancy.⁶ As both phyllodes and fibroadenoma belong to the fibroepithelial lesion, diagnosis of phyllodes by fine needle aspiration is unreliable. The differential diagnosis of fibroadenoma vs phyllodes tumour⁸ by the fine needle aspiration cytology is not possible in the majority of cases^{8, 13}. In our study all patients were diagnosed by histopathological examination, ten patients benign and 1 patient malignant phyllodes tumour.

Mammography or USG is not an accurate tool for the diagnosis of phyllodes or to predict whether the lesion is low grade or aggressive^{4, 12, 14}.

Wide surgical excision is the treatment of choice for phyllodes tumour⁸. In malignant variety, simple

mastectomy is the standard treatment. Axillary lymph node metastasis occurs in 10% of patients with malignant phyllodes, thus routine axillary lymph node dissection is unjustified^{4, 6, 15, 16}. In our study wide local excision done in eight patients, two patients treated by simple mastectomy, and one patient treated by simple mastectomy with axillary clearance. Adjuvant chemotherapy given⁸, radiotherapy not recommended. The role of radiation therapy remains unclear.¹⁷ Pandey, et al shows adjuvant radiotherapy appears to improve the disease free survival. Recurrence and metastasis remain the most serious problem associated with phyllodes tumour.¹⁸ Local recurrence is 15%, distant metastasis 25%^{4, 5, 6, 19}. Kalposis I et al study shows - local recurrence occurred in 40% at mean time of 28 months after primary treatment. Distant metastasis occurred in 27% patient at average time of 25.6 months. Tumour size and surgical margins were found to be the principal determinants of local recurrence and distal metastasis.²⁰

In follow up of last 15 month, one patient developed local recurrence, she underwent simple mastectomy and histopathology report was benign lesion. One patient with malignant phyllodes tumour developed solitary bony metastasis in the right iliac bone. She received a course of chemotherapy.

Conclusion:

The clinical findings of a large painless mobile tumour of rapid onset should raise the suspicion of phyllodes tumour. Benign phyllodes tumour can safely be treated by wide local excision with an adequate [1-2cm] margins. Simple mastectomy is the standard treatment for malignant lesion. Recurrence of phyllodes tumour, is treated by simple mastectomy, 5yr survival rate of benign lesion is 90%, malignant lesion is 60%. The role of adjuvant chemotherapy and radiotherapy is not clear. Metastatic phyllodes tumour has a poor prognosis. Close follow up is mandatory.

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