## A RARE CASE OF PHYLLODES TUMOUR

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#### **ABSTRACT**

Phyllodes tumours are rare and account for 0.4% of all breast tumours (Dyer *et al.*, 1966). The majority of them tend to be less than 5 cms in size with giant tumours larger than 10 cms being about 20% of these cases<sup>1</sup>. They display a broad range of clinical and pathological behavior and are regarded as falling within the spectrum of fibroepithelial neoplasms. Surgery has been the primary modality of treatment. However the extent of resection and the role of adjuvant radiotherapy and chemotherapy are still controversial. The risk of recurrence is (4.7% - 30%) for benign phyllodes tumour and (30% - 65%) for borderline and malignant phyllodes tumour (Popescu *et al.*, 1991). A 45 year old female presented with complaints of lump in the left breast for six months. No other associated symptoms. On examination a swelling of sized 10x8 cms occupied in the entire breast with individual mobility within the breast. All basic investigations were normal except bilateral mammogram showed grade 4 and grade 2 in the left breast and right breast respectively. The Preoperative biopsy was phyllodes tumour. Hence we did left simple mastectomy and right excision biopsy which were consistent of benign phyllodes tumour of left breast and right fibroadenoma breast. The post operative periods were uneventful and regular follow up. The case is being presented for its rarity.

Keywords: Phyllodes Tumour, Fibroepithelial Tumours, Mastectomy, Chemotherapy

### INTRODUCTION

Phyllodes tumours are rare and account for 0.4% of all breast tumours (Dyer *et al.*, 1966). The majority of them tend to be less than 5 cms in size with giant tumours larger than 10 cms being about 20% of these cases (Dyer *et al.*, 1966).

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Surgery has been the primary modality of treatment. However the extent of resection and the role of adjuvant radiotherapy and chemotherapy are still controversial.

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#### **CASES**

A 45 year old female admitted with complaints of lump of left breast for 6 months duration without any associated symptoms. She was married since five years and barren. There was no comorbid illness. On local examination of left breast a lump of sized 10x8 cms, occupied in the entire breast with multiple dilated veins noted over the entire breast.

The mobility of the lump was within the left breast. No other significant findings noted over the left breast. There was a small lump of sized 2x2 cms noted in the upper, inner quadrant of the right breast with independent mobility (Figure 1.1).

All basic investigations were within normal limits. The bilateral mammogram showed grade 4 lesion in the left breast and grade 2 lesion in the right breast.

Then we proceeded for preop biopsy confirmed as phyllodes tumour. Hence we performed left simple mastectomy and right excision biopsy (Figure 1.2).

The post operative period was uneventful. The final excised specimen HPE was consistent with left benign phyllodes tumour and right fibroadenoma breast. The patient is on regular follow up (Figure 1.3).



Figure 1.1: Shows the lump of large sized in the left breast

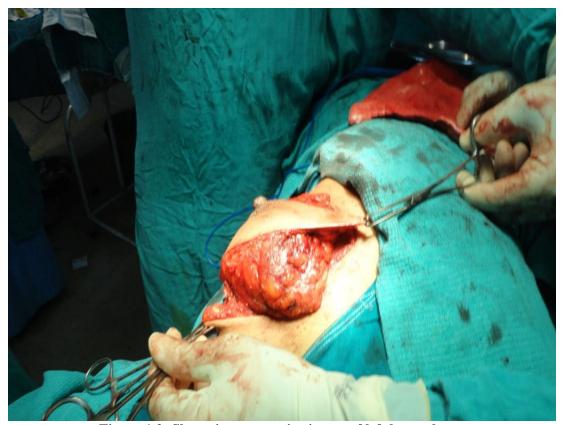


Figure 1.2: Shows intraoperative image of left breast lump

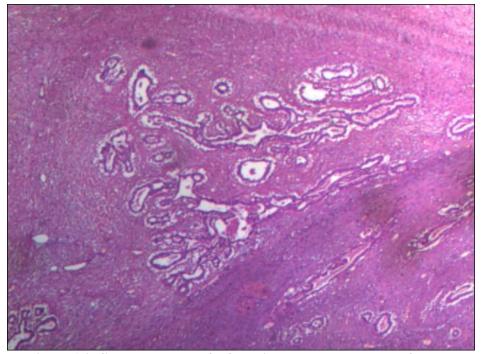


Figure 1.3: Shows the HPE of left benign phyllodes tumour of breast

### DISCUSSION

Phyllodes tumours are rare fibroepithelial lesions that account for less than 1% of all breast neoplasms (Dyer et al., 1966). With the non-operative management of fibroadenomas widely adopted, the importance of phyllodes tumours today lies in the need to differentiate them from other benign breast lesions. All breast lumps should be triple assessed and the diagnosis of a phyllodes tumour considered in women, particularly over the age of 35 years, who present with a rapidly growing "benign" breast lump. Treatment can be by either wide excision or mastectomy provided histologically clear specimen margins are ensured. Nodal metastases are rare and routine axillary dissection is not recommended. Few reliable clinical and histological prognostic factors have been identified. Local recurrence occurs in approximately 15% of patients and is more common after incomplete excision. It can usually be controlled by further surgery. Repeated local recurrence has been reported without the development of distant metastases or reduced survival. Approximately 20% of patients with malignant phyllodes tumours develop distant metastases. Long term survival with distant metastases is rare. Phyllodes tumours are rare fibroepithelial lesions that account for less than 1% of all breast neoplasms (Dver et al., 1966; Popescu et al., 1991; Buchanan, 1995). First described by Johannes (1838) he coined the termcystosarcoma phyllodes; a misleading description as the tumours are rarely cystic and the majority follow a benign clinical course. In total, more than 60 synonyms have been reported (Fiks, 1982) but today, the World Health Organisation regards phyllodes tumour as the most appropriate nomenclature (World Health Organisation (1982). Displaying a broad range of clinical and pathological behaviour, phyllodes tumours should be regarded as a spectrum of fibroepithelial neoplasms rather than a single disease entity. At one extreme, malignant phyllodes tumours, if inadequately treated, have a propensity for rapid growth and metastatic spread. In contrast, benign phyllodes tumours on clinical, radiological, and cytological examination are often indistinguishable from fibroadenomas and can be cured by local surgery. With the non-operative management of fibroadenomas widely adopted, the importance of phyllodes tumours today lies in the need to differentiate them from other benign breast lesions.

A Medline search of the English literature published since 1975 was performed using the medical subject heading "phyllodes tumour". Further articles were identified from the reference lists of papers reviewed. In view of the rarity of these tumours, most reported clinicopathological series are small, retrospective in

nature, with limited long term follow up. As both phyllodes tumours and fibroadenomas belong to a spectrum of fibroepithelial lesions, accurate cytological diagnosis of phyllodes tumours by fine needle aspiration can be difficult (Chua *et al.*, 1989). Cytologically, it is often easier to differentiate benign from malignant phyllodes tumours than to separate benign phyllodes tumours from fibroadenomas (Stebbing and Nash, 1995). The presence of cohesive stromal cells (phyllodes fragments), isolated mesenchymal cells, clusters of hyperplastic duct cells, foreign body giant cells, bipolar naked nuclei, and the absence of apocrine metaplasia are highly suggestive of a phyllodes tumour (Umpleby *et al.*, 1889). In the correct clinical setting, the presence of both epithelial and stromal elements within the cytological smear supports the diagnosis (Ciatto *et al.*, 1992). Epithelial cells may, however, be absent from specimens taken from malignant lesions (Iau *et al.*, 1998). The reporting of C3 (possibly benign) or C4 (possibly malignant) cytology from what appears to be a fibroadenoma should raise clinical suspicion of a phyllodes tumour (Oberman, 1965).

With the increased use of core biopsies, preoperative diagnostic accuracy should improve and confusion with breast carcinomas should rarely occur (Amerson, 1970). The natural history of fibroadenomas has recently been clearly defined. With the negligible increased risk of malignancy and the recognition that 40% of fibroadenomas reduce in size over a two year period, non-operative management has been widely adopted (Adachi *et al.*, 1993). 91 With the low prevalence of phyllodes tumours among all benign breast lumps, routine excision of all benign breast lumps cannot be advocated.

However, treatment protocols need to be adopted that allow the timely identification of phyllodes tumours. As most phyllodes tumours grow faster than fibroadenomas, histological assessment and possible excision of a benign breast lump should be considered if rapid growth is seen during a period of observation (Nambiar and Kutty, 1974).

### Conclusion

Hence we reported the benign phyllodes tumour to give the following information. All rapidly growing benign breast lesions require histological assessment. Wide excision or mastectomy should be performed ensuring histological clear margins. Mastectomy for malignant tumours offers no survival advantage. Axillary nodal dissection is not required.

### REFERENCES

Adachi Y, Matsushima T and Kido A et al., (1993). Phyllodes tumor in adolescents. Report of two cases and review of the literature. *Breast Diseases* 6 285–93.

Amerson JR (1970). Cystosarcoma in adolescent females. Annals of Surgery 171 849–58.

**Buchanan ED** (1995). Cystosarcoma phyllodes and its surgical management. *American Journal of Surgery* 61 350–5.

**Chua CL, Thomas A and Ng BK (1989).** Cystosarcoma phyllodes: a review of surgical options. *Surgery* **105** 141–7.

Ciatto S, Bonardi R and Cataliotti L *et al.*, (1992). Phyllodes tumor of the breast: a multicenter series of 59 cases. *European Journal of Surgical Oncology* 18 545–9.

**Dyer NH, Bridger JE and Taylor RS (1966).** Cystosarcoma phylloides. *British Journal of Surgery* **53** 450–5.

Fiks A (1982). Cystosarcoma phyllodes of the mammary gland—Muller's tumor. *Virchows Archiv* 392

**Iau PTC, Lim TC and Png DJC** *et al.*, (1998). Phyllodes tumour: an update of 40 cases. *Annals of the Academy of Medicine, Singapore* 27 200–3.

Müller J (1838). *Uber den feineren Ban und Die Formen der Krankaften Geschwulste* Reiner G, Berlin 1 54–7.

**Nambiar R and Kutty MK (1974).** Giant fibro-adenoma (cystosarcoma phyllodes) in adolescent females: a clinicopathological study. *British Journal of Surgery* **61** 113–17.

**Oberman HA** (1965). Cystosarcoma phyllodes. A clinicopathologic study of hypercellular periductal stromal neoplasms of the breast. *Cancer* 18 697–710.

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**Popescu I, Serbanescu M and Ivaschescu C (1991).** Phyllodes tumours of the breast. *Zentbl Chir* **116** 327–36.

**Stebbing JF and Nash AG (1995).** Diagnosis and management of phyllodes tumour of the breast: experience of 33 cases at a specialist centre. *Annals of the Royal College of Surgeons of England* **77** 181–4.

**Umpleby HC, Guyer PB and Moore I** *et al.*, **(1989).** An evaluation of the preoperative diagnosis and management of cystosarcoma phyllodes. *Annals of the Royal College of Surgeons of England* **71** 285. **World Health Organisation (1982).** Histological typing of breast tumors. *Tumori* **68** 181–98.