

BENIGN PHYLLODES TUMOUR OF BREAST WITH SPONTANEOUS ULCERATION: A CASE REPORT

Surgery

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ABSTRACT

INTRODUCTION: The phyllodes tumour breast is a very uncommon neoplasm that represent less than 1% (0.3 to 0.5%) of all female breast tumours. They also represent 2.5% of fibro-epithelial tumours. Phyllodes tumours grow in the connective tissue of the breast, called the stroma. It has a spectrum of aggressiveness in biological behaviour with chance of local recurrence and, occasionally, metastasis. (9). Accuracy in the preoperative pathological diagnosis helps in planning of the surgical procedure and avoidance of revision surgery (1,2,3). Surgical treatment can be either wide local excision of the tumour or mastectomy (achieve histologically clear margins). Because of the tendency of phyllodes tumours to recur and their potentiality for malignant transformation, their pre-operative diagnosis and management is very crucial. (4,5,6).

PRESENTATION OF THE CASE: A 44 year old female came to Chettinad Hospital with complaints of lump (4 years), rapid increase in size in the last 2 weeks and spontaneous ulceration over the lump (1 week). With the history of recent increase in size, positive family history for breast malignancy and presence of ulceration (spontaneous onset) and peau d orange over the breast, the provisional diagnosis was made to be either malignant cystosarcoma phyllodes or breast malignancy. FNAC showed the possibility of Cellular Fibroadenoma Or phyllodes. Simple mastectomy was done and specimen sent for HPE. Finally, it was proven to be suggestive of benign phyllodes.

KEYWORDS

Peau D Orange, Phyllodes Tumours, Cellular Fibroadenoma, Breast Malignancy.

CASE REPORT:

A 44 year old female, known hypertensive, came with complaints of lump in her right breast for the last 4 years with recent history of increase in size of the lump in last 2 weeks to attain the present size. Patient also has recent history of pain over the lump for last 1 month.

History of ulceration over the lump present, spontaneous onset, no history of trauma and discharge from the ulcer for the last 1 week, discharge was scanty in amount, bloody, non foul smelling.

Patient had no history of recent onset of fever, significant weight loss, anorexia, bone pain, recent jaundice, cough with expectoration.

Patient had positive history of breast malignancy in her family (among first degree relative). Patient has 1 Child (child was breastfed), history of intrauterine death of 1 child, LMP was at the age of 39 years.

Local examination of:

left breast: NAD.

Right breast: A lump of size 10*8 cm was palpable over the upper outer quadrant, Irregular borders, lobulated surface, variable in consistency, localised warmth +, no tenderness.

Lump was mobile with the breast tissue and not within the breast tissue, Discolouration present over the skin of the lump.

Ulcer + over the lump of size 2*2 cm, irregular margin, with bloody discharge from it. Peau d orange present over the medial side (lower inner quadrant) or right breast.

NAC - normal.

Bilateral axilla- no lymph nodes palpable.

Other systemic examination was normal.

All the investigations were done for the patient and were found to be under normal limits.

X RAY MAMMOGRAM: well defined lobulated radio- opacity with no definite calcifications noted in upper outer quadrant of right breast. **USG breast-** Multilobulated heteroechoic lesion of size 11* 7 cms noted in right breast at 7-11 O clock position. Lesion is extending up to the chest wall muscle. Shows internal vascularity. Few subcentimetric axillary lymph nodes noted measuring up to 8 mm on left side. Few globular radio opacities noted in bilateral axillary region- probable lymph nodes. Impression: Multilobulated heteroechoic lesion with internal vascularity in right breast- BIRADS IVA.

CT CHEST- lobulated irregular soft tissue density lesion with well defined margin of size 10*9*11 cm noted in outer quadrant of right breast.

Lesion does not show calcification/ necrosis. No evidence of chest wall invasion.

After clinical history, examination and investigations, provisional diagnosis was made to be **MALIGNANT RIGHT BREAST PHYLLODES TUMOUR OR ?CARCINOMA RIGHT BREAST.** And hence, FNAC right breast was planned and proceed accordingly.

FNAC RIGHT BREAST: Microscopy: cellular smears shows ductal epithelial cells in the form of cohesive clusters, interspersed with myoepithelial cells. The background shows scattered bipolar cells, cyst macrophages and a good number of stromal fragments.

Impression: benign proliferation breast disease. Possibility of cellular fibroadenoma or phyllodes.

Patient was taken up for Mastectomy under general anaesthesia.

The specimen was sent for biopsy (histopathological examination).

HPE Report: sections from the tumour shows sheets of spindle shaped cells trying to form leaf like pattern with lining bilayered epithelium. The stroma shows myxoid changes and occasional areas of necrosis and some areas of foci shows foamy macrophages. Mitosis noted in tumour area is 4/10 HPF.

All the margins free of tumour.

Final impression: suggestive of benign phyllodes.



Fig.1 Pre Op Images Of The Case.

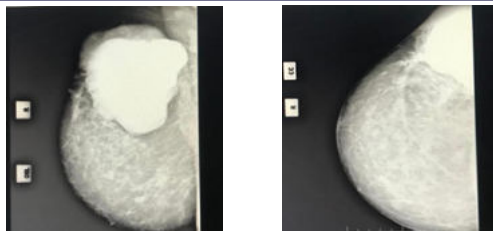


Fig. 2 Right Breast: Well Defined Lobulated Radio- Opacity With No Definite Calcifications.

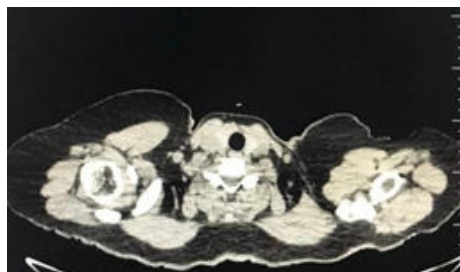


Fig. 3 Ct Chest Images Shows Lobulated Irregular Soft Tissue Density Lesion.



Fig. 4 Intra Operative Images.



Fig. 5 Microscopic Image Showing Spindle Shaped Cells Trying To Form Leaf Like Pattern With Lining Bilayered Epithelium.

DISCUSSION OF THE CASE :

The nomenclature, presentation, and diagnosis of phyllodes tumours (including cystosarcoma phyllodes) have posed many problems for surgeons. These tumours can be benign, borderline, or malignant. Borderline tumours have a greater potential for local recurrence.

Phyllodes tumours constitute a cluster of fibroepithelial neoplasms. They are said to resemble the intracanalicular fibroadenoma morphologically but with leaf like structure (Phyllus) hence the name phyllodes and the stroma cellularity is more in phyllodes. As for the malignant variant of phyllodes tumour, it can sometimes be mistaken as the primary breast sarcoma or as metaplastic breast carcinoma.

Mammographic evidence of calcifications and morphologic evidence of necrosis do not distinguish between benign, borderline, and malignant phyllodes tumours. And even FNAC has sensitivity of 63% to diagnose phyllodes tumour. (7,8)

Phyllodes tumours are usually sharply demarcated from the surrounding breast tissue which appears to be distorted and compressed. The connective tissue consists of the bulk of these tumours, which have mixed gelatinous, solid, and cystic areas

representing the sites of infarction and necrosis.

These alterations give the tumor surface the typical leaf like (phyllus) appearance. In comparison to fibroadenoma, the stroma of a phyllodes tumor usually has a greater cellular activity. In addition to this, the stromal cells of fibroadenomas are considered to be either polyclonal or monoclonal (derived from a single progenitor cell), whereas those of phyllodes tumours are always monoclonal. Most malignant phyllodes tumours contain liposarcomatous or rhabdomyosarcomatous elements rather than fibrosarcomatous elements. Malignant tumours can be identified by the mitotic index, number of mitosis and presence of invasive foci at the tumour margins. (10,11)

Definite diagnosis of phyllodes tumours cytologically by FNAC is sometimes difficult because both phyllodes tumours and Fibroadenomas are considered to be fibro- epithelial lesions. Characteristic features which are highly indicative of phyllode tumour are groups of hyper plastic duct cells , giant cells , cohesive cells of stromatolites tissue, bipolar naked nucleus, absence of an apocrine metaplasia.

CONCLUSION:

Phyllodes tumours have specific clinical characteristic features and based on the findings, they can be considered as differential diagnosis for patients presenting with breast lump.

Because of the tendency of phyllodes to either re-occur or to have the potential of malignant transformation, the diagnosis and planning the management is very important.

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