



A CLINICAL STUDY OF PHYLLOIDES TUMOUR OF BREAST

Surgery

Dr Narayanamoorthy Ramasamy

Associate Professor, Department Of Surgery, Government Dharmapuri Medical College And Hospital, Dharmapuri, Tamilnadu, India

Dr Malathi VEDIYAPPAN*

Assistant Professor, Department Of Surgery, Government Dharmapuri Medical College And Hospital, Dharmapuri, Tamilnadu, India *Corresponding Author

ABSTRACT

Background: Phylloides tumours are distinctive fibro-epithelial lesion of breast tissue. It is a rare tumour representing 2.5% of all fibro-epithelial lesions of the breast and with incidence of 0.3-0.5% of female breast tumours. Displaying a broad range of clinical and pathological behaviour, phylloides tumours should be regarded as a spectrum of fibro-epithelial neoplasms rather than a single entity.

METHODOLOGY: A prospective clinical study was undertaken at Government Dharmapuri medical college hospital, Dharmapuri. The study was conducted from Jan 2017 to Oct 2018

CONCLUSION: Phylloides Tumor Is An Uncommon Breast Tumour That Accounts For 0.3- 0.5% Of Female Breast Lump cases. The Clinical Course of PT Is Unpredictable and commonly marked by a high incidence of local recurrence and unpredictable distant metastases. Common in the age group of 41- 50yrs. Most of them are benign.

KEYWORDS

Cystosarcoma phylloides

INTRODUCTION

Breast is a dynamic structure, which undergoes changes throughout women's reproductive life, and superimposed on this, cyclical changes throughout menstrual cycle. The pathogenesis involves disturbance in the breast physiology extending from an extreme normality to well defined processes.

Cystosarcoma phylloides is defined as a clinical distinctive fibroepithelial neoplasm of breast tissue. It is a rare tumour representing 2.5% of all fibroepithelial lesions of the breast and with incidence of 0.3-0.5% of female breast tumours.

Although it can occur at any age from adolescents to elderly, in most of the cases occurs between 35 and 55 yrs of age. Most of them are indistinguishable from benign fibroadenomas and present as smooth, painless breast lumps.

Phylloides tumours exhibit a wide spectrum of clinical and pathological behavior ranging from benign(B), borderline(BL), and locally recurrent to malignant(M) and metastatic type. Metastasis is rare and mainly hematogenous to lungs and bones. Lymphatic involvement is infrequent. 20% of both benign and malignant tumours may recur. Most patients will not experience a recurrence, but even small, low grade tumours may recur if inadequately excised. Occasional patients have extremely aggressive disease that may result in death.

Diagnosis is based on clinical examination, mammography/sonography and FNAC but final diagnosis is based on histologic findings. Histopathologic analysis reveals the characteristics appearance of leaf-like architecture that consists of long, cleft-like spaces and papillary projections of hyperplastic or atypical epithelial-lined cellular stroma, increased stromal overgrowth and mitosis consistently predicting malignant and metastatic potential.

The Surgical intervention varied from simpler excision(Lumpectomy) /wide local excision(WLE) in benign cases to simple/modified radical or Radical mastectomy(SM/MRM/RM) in malignant and recurrent tumours.

With the non-operative management of fibroadenomas widely adopted, the importance of phylloides tumours today lies in the need to differentiate them from other benign breast lesions. In view of rarity of these tumours, most reported clinicopathological series are small, retrospective in nature, with limited long term follow up.

AIMS & OBJECTIVES:

The aim is to study the clinical presentations of Phylloides tumour of breast.

The main objective of this study is

- To study the various clinical presentations of the diseases in various age groups, correlating Clinicopathological aspects, and the outcomes

PATIENTS AND METHODS:

A prospective clinical study was undertaken at Government Dharmapuri medical college hospital, Dharmapuri. The study was conducted from Jan 2017 to Oct 2018

STUDY DESIGN: An observational descriptive study

SAMPLE SIZE: 30 cases of phylloides tumour of Breast included during study period.

A detailed clinically history was elucidated, followed by careful clinical examination, which were recorded as per the proforma.

The inclusion and exclusion criterias were as follows:

INCLUSION CRITERIA:

- Patients above 18 years of age and above
- Patients with clinical or histopathologically proven phylloides tumour breast.

EXCLUSION CRITERIA:

- Patients with suspected or documented Carcinoma Breast.

METHODOLOGY:

30 patients presenting with phylloides tumour of breast admitted to Government Dharmapuri Medical college hospital were studied after obtaining informed consent and satisfying the inclusion and exclusion criteria. Ethical committee clearance obtained. Patient details including clinical history, examination findings, investigations, surgery performed and final HPE reports were assessed from patients' files.

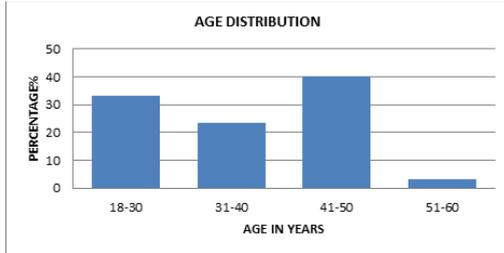
OBSERVATION AND RESULTS

AGE AT PRESENTATION

The age distribution of phylloides tumour showed that most common affected age group was 41-50 yrs with 12 cases with a mean age of 36.9 yrs

Age IN YEARS	FREQUENCY	PERCENTAGE
18-30	10	33.3
31-40	7	23.3
41-50	12	40
51-60	1	3.3

	Present study	Benakatti Rajendra et al
Mean age	36.9	37.4

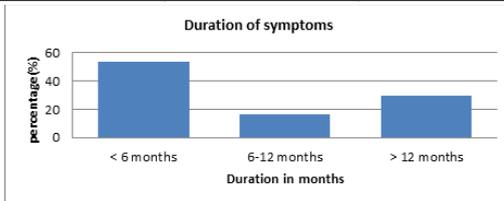


DURATION OF SYMPTOMS

The duration of symptoms ranges from 1 month to 24 months, of which most (53.3%) patients presented with complaints of less than six months duration. The mean duration of symptoms is 7.5 months

DURATION	FREQUENCY	PERCENTAGE(%)
< 6 months	16	53.3
6-12 months	5	16.7
> 12 months	9	30

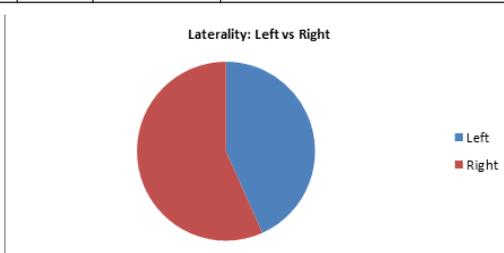
	Present study	P.R.K.Bhargav et al
Mean duration	7.5 months	30 months



LATERALITY OF BREAST LUMP:

OUT OF 30 CASES, 13 were in the left breast(43.3%), 17 in the right breast(56.7%)

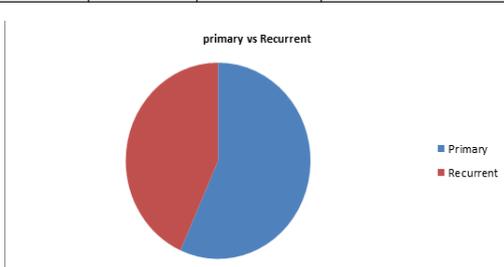
	Present study		Benakatti Rajendra et all (percentage)
	Number	Percentage	
Left	13	43.3	53.3
Right	17	56.7	46.7



PRESENTATION TO THE HOSPITAL:

Out of 30 cases 17 were primary cases, 13 cases already underwent some form of surgery outside before presenting to our hospital.

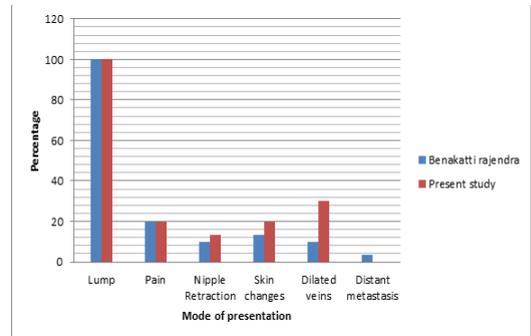
	Present study		Benakatti Rajendra et all (percentage)
	Number	Percentage	
Primary	17	56.7	66.7
Recurrent	13	43.3	33.3



MODE OF PRESENTATION:

All the cases(100%) presented with lump in breast and six patients(20%) presented with pain associated with the lump, six patients(20%) presented with skin changes(Ulcer, Peu d orange), and four cases(13.3%) presented with nipple retraction and nine cases (30%) presented with dilated veins.

Presentation	Present study		Benakatti Rajendra et all (percentage)
	Number	Percentage(%)	
Lump	30	100	100
Pain	6	20	20
Nipple retraction	4	13.3	10
Skin changes	6	20	13.3
Dilated veins	9	30	10
Bosselated surface	10	33.3	
Chest wall involvement	3	10	
Distant metastasis	0	0	3.3

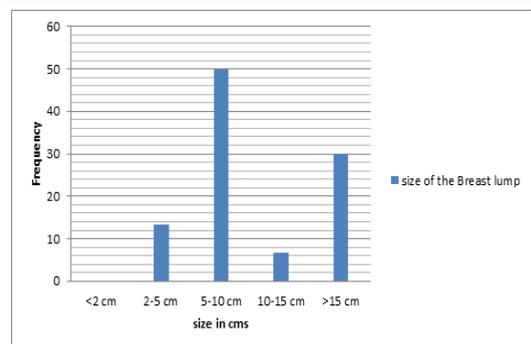


SIZE OF THE BREAST LUMP:

Out of 30 cases 50% of the sample presented with lump size of 5-10 cm with a mean size of 11.1 cms.

Size	Present Study		Benakatti Rajendra et all (percentage)
	Number	Percentage (%)	
<2 cm	0	0	9.4
2-5 cm	4	13.3	21.8
5-10 cm	15	50	43.7
10-15 cm	2	6.7	25
>15 cm	9	30	0

	Present Study	Benakatti Rajendra et all (percentage)
Mean size in cms	11.1	6

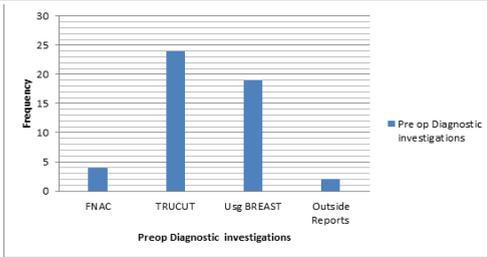


PRE-OP DIAGNOSTIC INVESTIGATIONS:

FNAC was done in 6 patients of which 4 were reported as Phylloides tumour.

Trucut biopsy was done in 24 cases, of which 24 were suggestive of Phylloides tumour. Slides & Blocks reviewed from outside in 2 cases were phylloides tumour Usg Breast was done in 19 cases of which 16 were reported as Phylloides tumour, 2 as Fibroadenoma and 1 case as Breast abscess.

Investigation	Present study			Benakatti Rajendra et all (percentage)
	Number	Diagnosed	Percentage(%)	
FNAC	6	4	66.7	50
TRUCUT	24	24	100	85.7
USG BREAST	19	16	84.2	-
OUTSIDE REPORTS	2	2	100	60

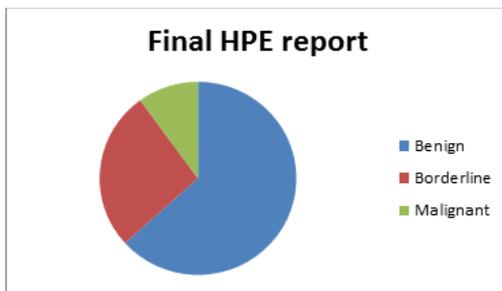


FINAL HISTOPATHOLOGICAL REPORT

The present study shows that most of the cases under the study belongs to benign category(63.3%) whereas borderline is 26.7% and malignant is 10%

The widely accepted definitions as proposed by Azzopardi and Salvadori et al has been used for this classification

	Present study		Benakatti Rajendra et al (percentage)
	Number	Percentage	
Benign	19	63.3	66.7
Borderline	8	26.7	13.3
Malignant	3	10	20



DISCUSSION:

Cystasarcoma phyllodes is an uncommon Fibroepithelial breast neoplasm that accounts for 0.3- 0.5 % of female Breast lump cases. This tumours can occur in woman of all ages, including adolescents and the elderly . The majority arise in women between ages 35-55 years.

Displaying a broad range of clinical and pathological behaviour , Phylloides tumours should be regarded as a spectrum of Fibroepithelial neoplasms rather than a single disease entity. Clinical and pathological behaviour ranging from benign (B), borderline(BL), and locally recurrent to Malignant(M) and metastatic type.

Benign phyllodes tumours on clinical, Radiological and cytological examination are often indistinguishable from fibroadenomas and can be cured by local surgery.

The clinical course of PT is Unpredictable and is commonly marked by a high incidence of local recurrence and unpredictable distant metastasis.

With the negligible increased risk of malignancy and the recognition that forty percent of Fibroadenomas reduce in size over a 2 year period, non operative management has been widely adopted.

With the low prevalence of PT among all benign breast lumps, routine excision of all breast benign lumps cannot be advocated. However treatment protocols need to be adopted that allow the timely identification of PT.

As most PT grow faster than fibroadenomas , histological assessment and possible excision of benign breast lump should be considered if rapid growth is seen during the period of observation.

Accurate cytological diagnosis of Phyllodes tumours by fine needle aspiration can be difficult, hence tissue biopsy such as trucut is essential.

The potential for PT to recur and metastasis was first recognised in 1930's.

Most patients will not experience the recurrence but even small lowgrade tumours may recur if inadequately excised.

Most malignant PT do not recur or metastasis while some histological benign tumours can show unusually aggressive clinical course.

Consequently it has been suggested that all PT should be regarded with malignant potential.

Local recurrence appears to be related to the extent of the initial surgery and should be regarded as failure of primary surgical treatment.

CONCLUSIONS AND SUMMARY

- Phylodes Tumor Is An Uncommon Breast Tumour That Accounts For 0.3- 0.5% Of Female Breast Lump Cases.
- The Clinical Course of PT Is Unpredictable and is commonly marked by a high incidence of local recurrence and unpredictable distant metastasis..
- Common in the age group of 41- 50yrs, with a mean age of 36.9 years.
- The mean duration of symptoms is 7.5 months.
- Out of the 30 cases 56.7% were primary cases, 43.3 Cases Already Underwent Some Form of Surgery Outside before presenting to our hospital.
- Out of the 30 cases, 13 were in the left breast (43.3), 17 in the right breast (56.7%)
- All the cases 100% presented with lump in breast and six patients (20%) presented with skin changes (ulcer, peau d orange), and four cases 13.3% presented with nipple retraction and nine cases (30%) presented with dilated veins.
- Of the 30 cases, 50% of the sample presented with lump size of 5-10cm with a mean size of 11.1 cms.
- Most of the cases under the study belong to benign category (63.3%), borderline is 26.7% and malignant is 10%.

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