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Management of phyllodes tumour (*Arbuda*): A case report

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CASE REPORT

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ABSTRACT

Breast lumps of benign types are the commonest type of breast disease amongst 40 per cent of female population. The chances of the growth being malignant make patients apprehensive. Phyllodes tumour involving the stroma of the breast is a common among females of around 40 years of age. Acharya Sushruta has advised *Chedana* of *Arbuda* i.e. excision of tumour to avoid recurrence. Considering the chances of recurrence surgical treatment of phyllodes is successful if excision is clubbed with mastectomy of the surrounding breast tissue.

A 65 years woman suffering from breast lump for 2 years was diagnosed with Phyllodes tumour clinically as well as with radiological aids. Malignancy was ruled out as per diagnostic criteria. Excision of the lump with 1cm margins was carried out as per surgery protocol. Biopsy report confirmed the diagnosis of benign phyllodes tumour. Patient has been stable since last one and a half year and recurrence has not been noticed. Thus, it can be concluded that an organised approach towards benign lesion like phyllodes tumour can help to alleviate anxiety and fear of patients.

Key Words

Phyllodes tumour, *Arbuda*, Benign breast lump, Excision, *Chedana*

Background

Breast lump is a quite common presentation in Indian women. It is more found in women of reproductive age. According to a study almost 25 per cent of women experience sort of breast disease in their lifetime[1]. Majority of breast disease are of benign origin. Approximately 40 per cent cases of benign breast diseases present as lump in breast[2]. The problem is that Patient associates every breast lump with cancer and hence is afraid of it.

Statistically also being the most common type of cancer in women, breast cancer accounts for 14 per cent of cancers in Indian women. Post cancer survival for women with breast cancer was reported 60 per cent for Indian women, as compared to 80 per cent in U.S. In India lack of awareness and poor early screening and diagnosis rates has resulted in this low survival rate[3]. Clinician must be particular in taking all cares to exclude carcinoma by proper history taking, clinical examination, and radiological aids such as mammography, ultrasonography and cyto-pathology analysis. If Diagnosis protocol results in benign lump of breast the treatment becomes easy for surgeons and a great comfort for patient too.

Phyllodes tumour is one of the benign lesions of breast. However, it can be locally aggressive (borderline) and sometimes metastatic also. It is also known as Cystosarcoma Phyllodes, Serocystic Disease of Brodie. Clinical manifestation of Phyllodes includes a tumour which attains large size quite quickly with prominent subcutaneous veins on it[4]. It is fearsome for many patients. However, complete cure can be assured after exclusion of malignancy proper mastectomy.

Case report

A 65 years old female patient presented with huge lump in right breast. She felt Lump first time before 2 years, which increased in size rapidly from last six months. There was no pain but patient was feeling heaviness in breast due to weight of lump. On examination Tumour was involving almost entire breast tissue. Subcutaneous veins above tumour were dilated and visible (Figure 1). Skin over tumour was stretched and shiny, nipple was not retracted, there was no discharge from nipple (Figure 2). On palpation it was observed that skin over the tumour was not fixed to it. Tumour was also mobile from deep pectoral muscles. Margins of the tumour were smooth and consistency was firm. Axillary lymph nodes were not palpable. Clinically provisional diagnosis was more of between Giant Fibroadenoma and Phyllodes tumour. Patient was advised FNAC of breast lump. Cytological features were suggestive of borderline Phyllodes tumour (Figure 3). For further investigation CT chest plain and contrast was done. Report stated a large well defined lobulated hypodense lesion of size 10 X 14 X 13.8cm (AP x ML x SI) in right breast parenchyma likely of neoplastic etiology. Fat planes and pectoralis muscle were maintained as there was no infiltration in deeper tissues. No lymphadenopathy in axillary region was observed. There were no signs of metastasis in liver, lungs or visualized bony part (Figure 4).

As malignancy was ruled out, excision of the lesion was planned. Lump was occupying almost entire breast, so simple mastectomy was the procedure of choice. Type of procedure, anaesthesia and probable consequences of surgery were explained to patients and her relatives. Chances of recurrence were also explained to patient. Patient was non diabetic and normotensive. No history of bronchial asthma, no known drug allergy, no history of previous surgery or any other major illness recorded. Routine preoperative blood investigation, ECG was done. Physician fitness for surgery under Short General anaesthesia along with additional local anaesthesia was taken. Consent was obtained. Patient was kept nil by mouth prior surgery. In supine position painting, draping and isolation of breast area is done. Under Short General Anaesthesia (Inj Propofol) elliptical incision was taken on right breast including nipple, areola and part of skin around. Margins of tumour were easily palpable and not fixed to skin. Dissection around lump was carried out on medial and lateral surface sparing 1 cm margin. Vessels encountered during separation were ligated with 2-0 vicryl and coagulated. Adjuvant local anesthesia was given using Inj. Bupivaccaine 0.5 per cent and Inj. Lignocaine 2 per cent with Adrenaline (1:100000). Lump was not adhered to deeper structure hence posterior dissection was carried by giving traction and exposing pectoralis muscle below (Figure 5). After complete excision from muscle layer bosselated surface was observed on posterior part of tumour with smooth margins (Figure 6). Haemostasis achieved, wound was washed with Normal saline and Povidone iodine solution, closed in layers with 2-0 Vicryl. Skin closed with 2-0 Ethilon. Corrugated drain was kept in through lateral dependent part of sutured wound (Figure 7). Operative procedure was uneventful. In Post-operative period patient was stable with routine treatment. Excised tumour weighed 820gm (Figure 8). Part of excised tumour was sent for histopatholgy. Biopsy report confirmed diagnosis as benign Phyllodes tumour (Figure 9). There was minimal soakage after 5 days so drain was removed. Regular dressing was done. Sutures were removed after 12 days. Patient is being monitored from almost one and half years now. No recurrence is observed yet. (Figure 10)

Discussion

In India every 28th women are likely to develop breast cancer in her lifetime[3]. Hence every patient of breast lump should be looked seriously. Even though most of the breast lumps are of benign origin, a well-structured and detail approach is required in every case. Big size tumour like Phyllodes is fearsome for patients and their relatives. But critical evaluation of lump gives idea about diagnosis, treatment and prognosis. In this case patient was of 65 years. Phyllodes tumour is not common in this age, however clinical presentations were typical. Protocol of Clinical examination followed by cytology, radiological imaging and histopathology after excision was carried out. As the initial diagnosis was of borderline Phyllodes tumour, despite malignancy was ruled out by CT chest, simple mastectomy was done sparing 1cm tumour margins. Because there are 19 per cent chances of local recurrence after excision[5].

In Ayurveda tumour is termed as *Arbuda*. According to Acharya Sushruta, a tumour should be excised6. However incomplete excision of tumour leads to its recurrence[7]. There was no recurrence after follow up of patient for about 18 months.

Conclusion

A well-structured approach in patients of breast lump helps for specific diagnosis. Triple assessment path way of Clinical examination, radiological imaging and pathological analysis should be followed. If malignancy is ruled out surgical excision of Phyllodes is definitive treatment. Considering the recurrence of Phyllodes, excision with 1cm tumour margin is useful for better prognosis.

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Figures

Figure 1: Anterior view. Large size of Phyllodes tumour occupying entire breast, Prominent subcutaneous veins over tumour.

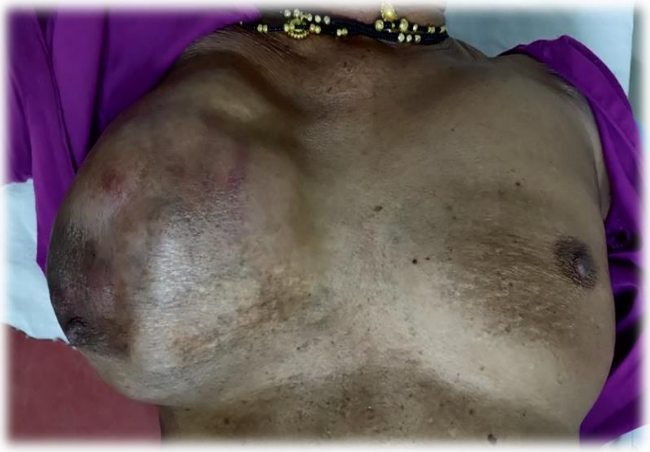


Figure 2: Antero-lateral view. Streched-shiny skin over phyllodes tumour, Nipple non-retracted, No discharge from nipple.

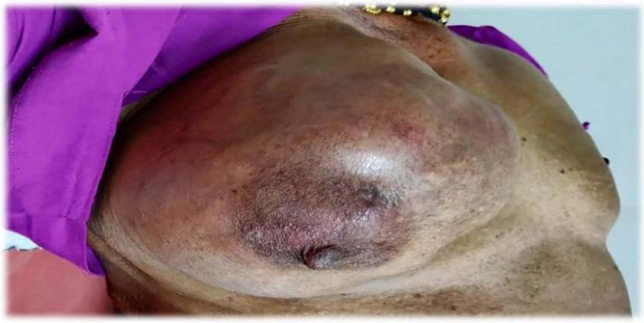
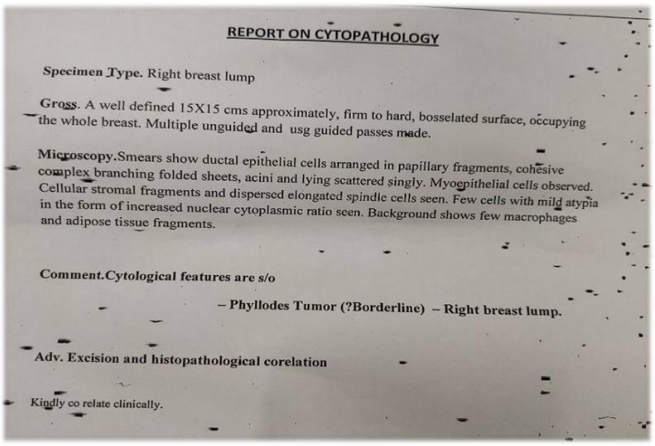


Figure 3: FNAC Report suggesting borderline? Phyllodes tumour.



REPORT ON CYTOPATHOLOGY

Specimen Type. Right breast lump

Gross. A well defined 15X15 cms approximately, firm to hard, bosselated surface, occupying the whole breast. Multiple unguided and usg guided passes made.

Microscopy. Smears show ductal epithelial cells arranged in papillary fragments, cohesive complex branching folded sheets, acini and lying scattered singly. Myoepithelial cells observed. Cellular stromal fragments and dispersed elongated spindle cells seen. Few cells with mild atypia in the form of increased nuclear cytoplasmic ratio seen. Background shows few macrophages and adipose tissue fragments.

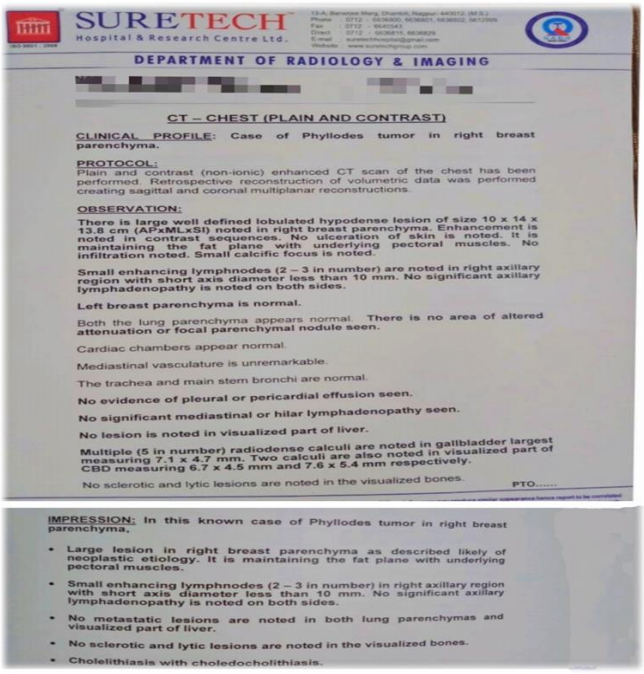
Comment. Cytological features are s/o

– Phyllodes Tumor (?Borderline) – Right breast lump.

Adv. Excision and histopathological corelation

Kindly co relate clinically.

Figure 4: CT Chest report showing No metastasis



SURETECH
Hospital & Research Centre Ltd.

DEPARTMENT OF RADIOLOGY & IMAGING

CT – CHEST (PLAIN AND CONTRAST)

CLINICAL PROFILE: Case of Phyllodes tumor in right breast parenchyma.

PROTOCOL:
Plain and contrast (non-ionic) enhanced CT scan of the chest has been performed. Retrospective reconstruction of volumetric data was performed creating sagittal and coronal multiplanar reconstructions.

OBSERVATION:
There is large well defined lobulated hypodense lesion of size 10 x 14 x 13.8 cm (AP×ML×SI) noted in right breast parenchyma. Enhancement is noted in contrast sequences. No ulceration of skin is noted. It is maintaining the fat plane with underlying pectoral muscles. No infiltration noted. Small calcific focus is noted.

Small enhancing lymphnodes (2 – 3 in number) are noted in right axillary region with short axis diameter less than 10 mm. No significant axillary lymphadenopathy is noted on both sides.

Left breast parenchyma is normal.

Both the lung parenchyma appears normal. There is no area of altered attenuation or focal parenchymal nodule seen.

Cardiac chambers appear normal.

Mediastinal vasculature is unremarkable.

The trachea and main stem bronchi are normal.

No evidence of pleural or pericardial effusion seen.

No significant mediastinal or hilar lymphadenopathy seen.

No lesion is noted in visualized part of liver.

Multiple (5 in number) radiodense calculi are noted in gallbladder largest measuring 7.1 x 4.7 mm. Two calculi are also noted in visualized part of CBD measuring 6.7 x 4.5 mm and 7.6 x 5.4 mm respectively.

No sclerotic and lytic lesions are noted in the visualized bones.

PTO.....

IMPRESSION: In this known case of Phyllodes tumor in right breast parenchyma,

- Large lesion in right breast parenchyma as described likely of neoplastic etiology. It is maintaining the fat plane with underlying pectoral muscles.
- Small enhancing lymphnodes (2 – 3 in number) in right axillary region with short axis diameter less than 10 mm. No significant axillary lymphadenopathy is noted on both sides.
- No metastatic lesions are noted in both lung parenchymas and visualized part of liver.
- No sclerotic and lytic lesions are noted in the visualized bones.
- Cholelithiasis with choledocholithiasis.

Figure 1: No fixity to pectoralis Major Muscle.

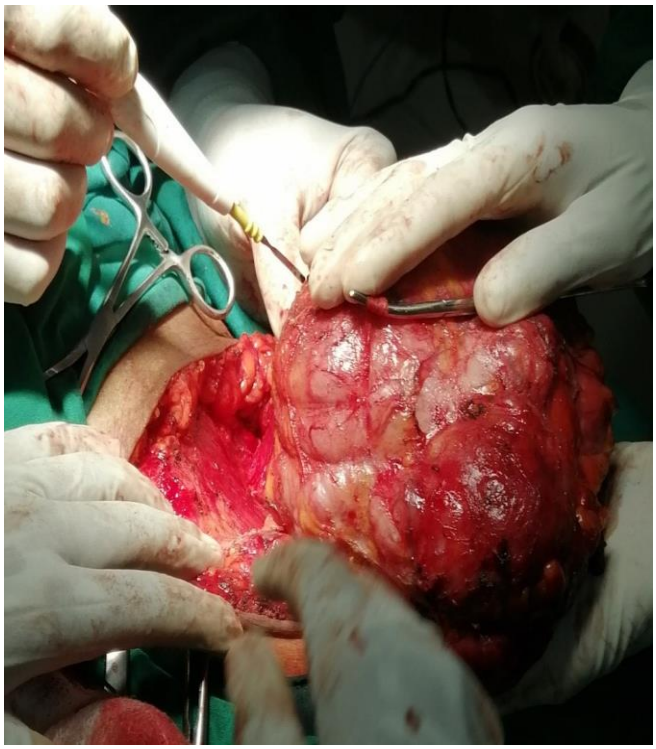


Figure 6: Bosselated surface of phyllodes tumour.

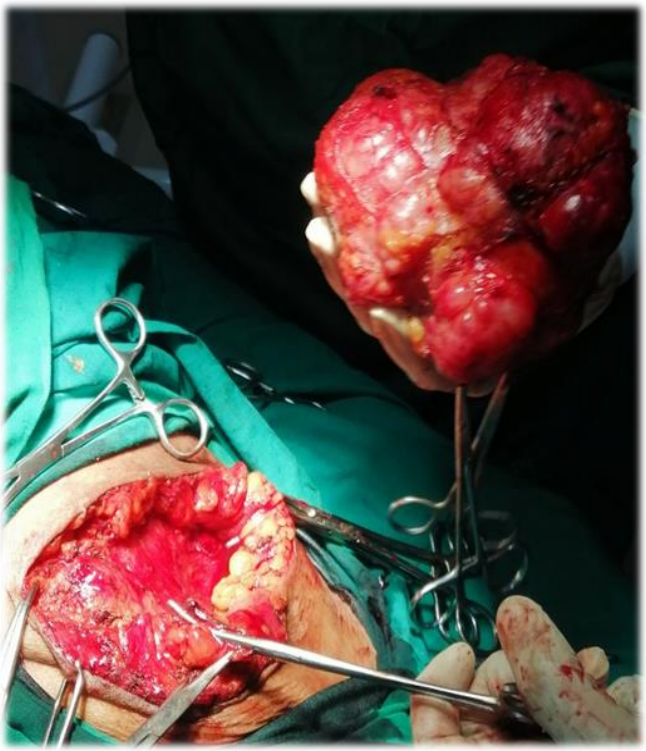


Figure 7: Post operated Sutured wound.

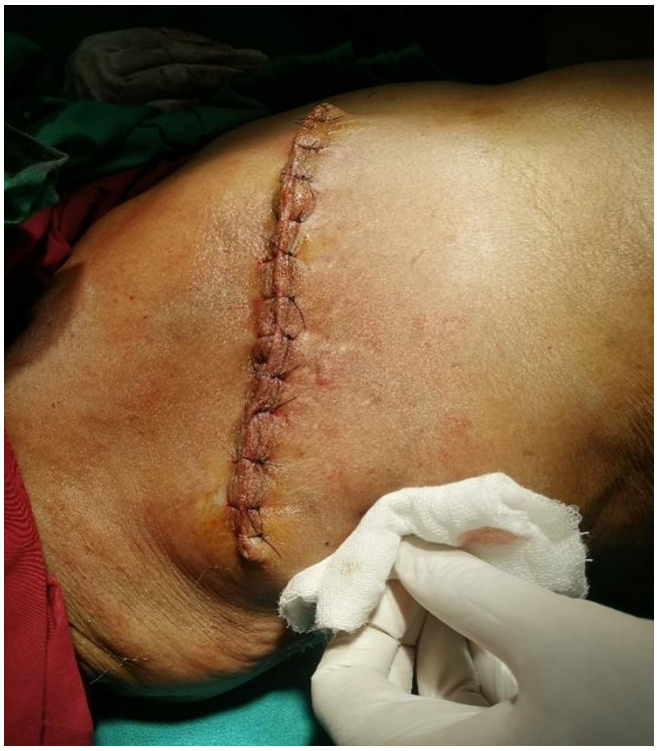


Figure 8: Excised phyllodes tumour (Simple Mastectomy).

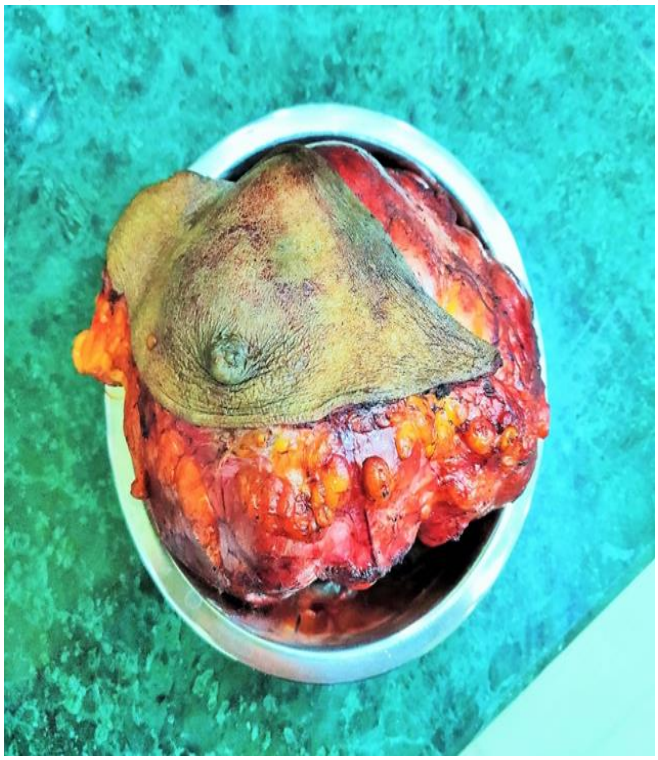


Figure 9: Histopatholgy report Confirming benign Phyllodes tumour.

MEDCIS

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Sample Regd Date : 2020-03-20 11:28
Sample Auth Date : 2020-04-07 11:41

MEDID : 5980126

Dr.PRAFULLA FADANVIS.,MS.

HISTOPATHOLOGY

TEST DESCRIPTION	RESULT	UNITS	BIOLOGICAL REFERENCE RANGES
BIOPSY - Medium Specimen (Method: Tissue Processing & Microscopy)			
SPECIMEN TYPE	(HP/1631/2020) Breast tissue for HPE.		
CLINICAL DIAGNOSIS	?? Phylloides tumor.		
GROSS EXAMINATION	Received one labelled bottle containing two grey white to grey brown soft tissues altogether measuring 4 x 3 x 2.5 cm. C/S grey white to grey brown. P/E.		
MICROSCOPIC EXAMINATION	H&E stained multiple sections taken from the biopsy submitted studied show features of benign phylloides tumor and composed of well circumscribed mass containing leaf like branching of the ducts and lined by inner cuboidal and outer myoepithelial lining. Intervening stroma shows marked proliferation of fibroblasts with areas of myxoid change, areas of hyalinization, increased vascularity and focal lympho-plasmacytic infiltrates.		
IMPRESSION	FEATURES ARE IN FAVOUR OF BENIGN PHYLLOIDES TUMOR.		
REMARKS	CORRELATE CLINICALLY		

Figure 10: Follow up after 18 months. Healed mastectomy wound.