

CASE REPORT

PROF-994

PHYLLOIDES TUMOUR; REPORT OF 7 CASES FROM QUETTA AND REVIEW OF LITERATURE



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INTRODUCTION

ehsanwadood@yahoo.co.in Phylloides tumour is a rare tumour of breast. Its incidence being less than 1% of malignant breast tumours¹. The term of phylloides was coined by Johanes Muller² due to leaf like cleft spaces on sectional surface. The age incidence is similar as of breast carcinoma, the median age is 45 years, although it can present at any age. It is a peculiar tumour that has characteristic pathological features. Grossly the size of tumour varies. Typical phylloides tumours are round relatively well circumscribed and firm, many are large and may acquire huge dimensions². Its sectional surface is solid with cleft like spaces imparting leaf like macroscopic appearance³. Microscopically the two features of phylloides tumour are stromal hypercellularity and presence of benign glandular component⁴.

Seven cases of phylloides tumour are discussed with their pathological features and clinical significance is highlighted.

CASE REPORTS

CASE -1

A 40 years female presented with huge mass right breast measuring 16x18x16cm. Sectional surface was grayish white with cleft like spaces. Microscopically, the stromal component was composed of uniform spindle shaped cells. No pleomorphism was seen. Mitosis were occasional. The epithelial component was composed of gland and duct like structure with uniform nuclei. Histologically it was of low grade malignancy.

CASE - 2

A 35 years female resident of Kalat presented with huge breast mass with wide ulceration, excision was performed. Grossly it measured 19x18x12 cm in g.d. Histologically it was phylloides tumour of intermediate grade malignancy. Other clinical parameters were unremarkable.

CASE - 3

A 2 years old Afghan female. We received her breast biopsy in three resected parts. The large measured 8x7x6 cm and smaller measured 5x3x2.5cm. Sectional surface was homogeneous grayish white partly friable.

Histologically there was marked stromal hypercellularity overshadowing the epithelial component consisting of storiform pattern. The overall histology of stroma resembled malignant fibrous histiocytoma with nuclear hyperchromasia and increased mitotic activity. Tumour giant cell were also present.

CASE - 4

A 18 years old female with history of breast mass for 3 months duration. She underwent mastectomy. The specimen measured 22x18x15cm. The nipple was flattened due to massive size of growth. Sectional surface was grayish white was necrosis seen at occasional places. The stromal component showed hypercellularity, pleomorphism hyperchromasia and mitotic activity. The tumour cells were seen involving the deeper margins of resections.

CASE -5

A 40 years old female presented with huge breast mass. Mastectomy was performed measuring 20x17x15 cm. Sectional surface was yellowish and fleshy. Histologically the stromal component has overshadowed epithelial component and resembled liposarcoma.

CASE - 6

A 18 years female resident of Khuzdar presented with recurrent breast mass. Grossly the specimen was received in three parts with grayish white to grayish brown partly hemorrhagic sectional surface. The stromal component was spindle cell sarcoma.

CASE - 7

25 years Afghan female presented with mass right breast. Lumpectomy specimen was received. She also had a fibroadenoma on left breast. Histology of stromal component resembled. Fibrous histiocytoma of intermediate grade malignancy.

DISCUSSION

Phylloides tumour is an uncommon tumour but challenging for the clinicians as well as pathologists. It occurs in same age group of breast carcinoma², with a median age of 45 years¹. This is in striking contrast to the age incidence of fibroadenoma which is commonly seen in women younger than 30 years of age⁴.

Although no age is immune. We have seen a case in 18 years old girl. The age incidence in our case is relatively younger average being (30 years). Shahid et al have reported 2% incidence of phylloides tumour in malignant tumours of five male breast.

The sectional surface has grayish white solid with cleft like spaces imparting leaf like appearance to the tumour, which is the bases of its name (Phylloides-Leaflike)³.

The characteristic histological features of the phylloides tumour are stromal hypercellularity and epithelial elements, the later is being in all forms of tumours². The stromal hypercellularity and its appearance differentiate phylloides tumour from fibroadenoma. The stromal component may have the appearance of malignant fibrous histiocytomas, liposarcoma and fibrosarcoma. The stromal features also determine the clinical aggressiveness of the tumour.

Ultra-structurally, the stromal cells show features of fibroblasts with occasional focal muscle differentiation². The epithelial component may acquire marked proliferative appearance.

Although a rarity feature of ductal or lobular carcinoma has been reported².

Histologic criteria such as cellular atypia mitotic activity and tumour margin for grading a tumour may be useful but these variables could not predict the clinical outcome¹. Regarding estrogen and progesterone receptor positivity, there are varying observations. This may be in part due to relative amount of stroma and epithelium in individual tumour¹. Progesterone receptor but not oestrogen receptor positivity has been reported².

The usual behaviour of the benign phylloides tumour is local recurrence with a very rare distant metastases. Recurrent tumour due to incomplete initial removal may still be cured by wide local excision². The risk of developing metastases in cytologically malignant tumour varies from 3-12% in different studies². Axillary lymph node involvement, lungs, bones, CNS Metastases also occurs. The metastatic lesion shows only stromal component metastases. However in lung due to entrapment of normal structures, this may simulate biphasic pattern.

There are reports about the use of flow cytometric analysis of DNA aneuploidy and proliferative index correlating these prognostic parameters with grading system^{6,7}. Regarding therapy, surgery is the mainstay of treatment for benign phylloides tumour. For small tumours it is reasonable to perform wide local excision with a good safer margin i.e. 1-2 cm. For most cytologically malignant tumours simple mastectomy is recommended, but if there is likelihood of facial involvement, wide margin excision of muscle is recommended. Usually axillary lymph nodes are not removed unless these are clinically involved.

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