An Ulcerated Giant Malignant Phyllodes Tumour Presenting in Septic Shock

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A 60-year-old post-menopausal woman of very low socioeconomic and educational status presented to the emergency department with a large bosselated mass in the right breast for 12 months and ulceration of the mass for six months [Table/Fig-1]. The mass was firm in consistency, non-tender and mobile with well defined margins. The contralateral breast was atrophic. There was no palpable lymphadenopathy in either axilla. She had a very poor general condition, with foul smelling discharge and presence of maggots in the ulcer. She did not have any co-morbid illness. At the time of presentation the patient was confused, dehydrated and pale. The pulse was 112/min, the blood pressure was 78/56mm Hg, and the respiratory rate was 18/min.

On investigation she had low haemoglobin (Hb: 6g/dl) and very high total leukocyte count [47.650×10⁹/L]. The blood urea was slightly elevated (69mg/dl) although the serum creatinine was normal (1.1mg/dl). The remaining blood parameters were within normal limits. A simple mastectomy was done in the emergency with a provisional diagnosis of an ulcerated malignant phyllodes tumour in septicaemic shock. The patient had an uneventful post-operative recovery, with transfusion of adequate blood and administration of intravenous antibiotics. The detailed evaluation during the hospital stay did not show any evidence of metastasis. Histopathological examination revealed stromal overgrowth with periductular spindle cell proliferation spreading out into the adjoining stroma with a mitotic rate of more than 10 per high power field, suggestive of malignant phyllodes tumour [Table/Fig-2a-c]. The patient was doing well in the follow-up, with no evidence of any recurrence or distant metastasis, but sudden death occurred at home after 10 month of surgery.



[Table/Fig-1]: Examination of right breast and axilla, showing a large ulcer of size 15x12x10cm with putrid smelling discharge which was observed over a bosselated mass of size 27x20x16cm in the breast.

Keywords: Breast neoplasm, Emergency, Mastectomy, Sepsis





[Table/Fig-2]: (a) [H&E stain, 10X]. Histopathological examination revealing leaf like projectios with epithelial and stromal proliferation, suggestive of phyllodes tumour. (b,c) [H&E stain, 10X & 100X]. Histopathological slide showing epithelial and stromal overgrowth with periductular spindle cell proliferation spreading out to the adjoining stroma with high mitotic rate, suggesting the features of malignant phyllodes tumour.

DISCUSSION

Phyllodes tumours are rare fibroepithelial tumours of the breast which constitute about 1% of all primary breast tumours. These tumours usually present as painless mobile breast lumps of averaging 4-5cm in size [1]. They can grow very rapidly into large sizes in a matter of weeks. Only 20% of the tumours have been found to grow more than 10cm and they are called as giant phyllodes tumour. Giant phyllodes tumour can be associated with skin ulceration because of pressure necrosis [1]. Malignant phyllodes tumour presenting with a giant ulcer is rare [1]. Secondary infection of such ulcers leading to sepsis and septic shock is still very rare.

In 2003, WHO classified phyllodes tumour into three groups benign, borderline and malignant, on the basis of degree of cellular atypia, mitotic activity, characteristics of the tumour margins and the presence of stromal growth [2]. Malignant phyllodes tumour is an aggressive breast malignancy which constitutes about 25% of all Phyllodes tumours.

Clinically, phyllodes tumours are frequently confused with fibroadenoma of breast because of similarity in presentation. Mammography and ultrasonography do not have any pathognomonic signs for the diagnosis of this tumour. FNAC is conclusive only in 23% of cases as compared to core biopsy which gives a correct diagnosis in 65% of cases [3]. Core needle biopsy is therefore opted in lesion suspicious of phyllodes tumour. Histopathologically, they are biphasic tumours with an epithelial and stromal component. Phyllodes tumours typically exhibit an enhanced intracanalicular growth pattern with leaf like projections into the duct lumen. Stromal overgrowth, cellular atypia, frequent mitosis and infiltrative borders are typically found in malignant phyllodes tumour. Microscopy is the only way to differentiate benign from a malignant phyllodes tumour.

In most of the cases wide local excision with a margin of 1-2cm for small tumours (<5cms) and segmental resection for large tumour (>5cm) is preferred [4]. Mastectomy is advised only in very large tumour or tumour having borderline and malignant histopathological features or when tumour-to-breast ratio is sufficiently high to preclude a satisfactory cosmetic result with wide local excision. The role of adjuvant treatment is unproven. It is necessary to follow-up the patients, because there is a high risk of local recurrence (21% for benign, 46% for borderline and 65% for malignant) and distant metastasis [5]. The 5 and 10 years survival rates for malignant phyllodes tumour range from 54% to 82% and from 23% to 42%, respectively.

Life threatening sepsis requiring emergency mastectomy is a rare occurrence. There is only one previously reported case of a giant phyllodes tumour of breast needing emergency mastectomy for life threatening sepsis [6].

Contribution of authors: Dr. Susanta, Dr. Satyajit and Dr. Rakesh prepared the manuscript. Dr. Tushar and Dr. Prakash critically reviewed and revised the manuscript.

Consent: Informed and written consent was obtained for publication of this case report.

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FINANCIAL OR OTHER COMPETING INTERESTS: None.

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Date of Submission: Mar 25, 2016 Date of Peer Review: Jul 16, 2016 Date of Acceptance: Aug 11, 2016 Date of Publishing: Dec 01, 2016