CASE REPORT

Breast Sarcoma

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ABSTRACT

Breast sarcoma is a very rare mesenchymal tumour and accounts for about 0.5% of the total breast malignancies. We present the case of a 69 years old female who presented with a painful breast lump. The report highlights the pre-operative tests and the operative approach adopted for this patient. Surgical resection is recommended, although debate exists about the extent of surgery. Neo adjuvant chemotherapy and radiotherapy has been advised in certain cases but their role is still not clear. Further work is needed to standardize the treatment.

Key words: *Breast. Sarcoma. Treatment. Painful breast lump.*

INTRODUCTION

Breast sarcoma is extremely rare tumour and accounts for less than 1% of all breast tumours.[1] The peak incidence of this tumour is in 5th to 6th decade.[2,3] Clinically, a majority of patients present with solitary painless lump in the breast. Unilateral or bilateral lymphadenopathy is usually absent. Pre-operative work-up includes radiological investigations along with histological diagnosis. Optimal treatment for breast sarcoma is not very clear but surgery is the main modality of treatment. The role of chemotherapy and radiotherapy is still open for discussion. Prognosis depends upon tumour grade and size. Early diagnosis and treatment also influence the outcome.

We report this rare condition in the present case report.

CASE REPORT

A 69 years old female presented with a 6 months history of right breast painful lump, which was progressively increasing in size. The patient did not have previous history of breast disease or any history of radiation. There was no family history of breast malignancy.

Examination revealed a large lump in the right breast (Figure 1) almost occupying whole of the breast. There were no palpable axillary lymph nodes. Breast ultrasound showed a solid mass with some cystic changes measuring 10 x 10 cm in size. The mammogram in addition to this, also revealed scattered microcalcification. CT scan of chest and abdomen did not show any evidence of metastasis. FNAC from right breast identified atypical cells. It was followed-up with tru-cut biopsy from right breast and it showed malignant spindle cells consistent with sarcoma.

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Modified radical mastectomy with Level I axillary clearance (Figure 2) was performed. Histology was confirmatory of a high grade sarcoma with free resection margins and all the 6 lymph nodes removed were negative for malignancy. Postoperative course was smooth and the patient was referred to oncology for further management. She had an uneventful follow-up with us for 2 months following surgery.

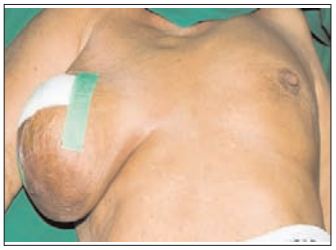

Figure 1: Mass in right breast.

Figure 2: Gross cross section of the tumour.

DISCUSSION

The treatment of breast sarcoma remains debatable regarding details. In spite of the consensus that surgery is the treatment of choice, debate exists regarding the level of resection. Most of the data supports simple mastectomy.

Callery *et al*. advised simple mastectomy;[4] while Pollard *et al*. in his series of 25 patients advised radical or Patey's mastectomy because of high local recurrence rate of 54 – 67% after simple mastectomy and wide local excision respectively in that series.[1] According to Gutman *et al*., a wide local excision with a 2 – 3 cm tumour free cuff of healthy tissue is sufficient, provided tumour breast ratio allows this conservation.[5] Whatever procedure is adopted, the aim should be to have a complete microscopic resection of the tumour as also concluded in studies by Fields *et al*.[6] and Bousquet *et al*.[2] Confavreux *et al*. reported that survival rate dropped to 38% from 72% when microscopically complete resection was not performed.[7]

The benefit of added axillary lymph node dissection remains questionable as sarcoma usually spreads

haematologically. Surov *et al*. in his study of 21 patients with breast sarcoma did not find unilateral or bilateral axillary lymphadenopathy during pre-operative assessment.[3] Pollard *et al*. in his review of 25 patients reported metastatic involvement only in one lymph node in a single patient.[1] Callery *et al*. in his study of 32 patients did not find any lymph node involvement.[4]

Bousquet *et al*. in his study of 103 patients did not recommend a mandatory axillary dissection.[2] Fields *et al*. also did not advise axillary staging as they did not find any positive lymph node in their study.[6]

The role of adjuvant radiotherapy is still not fully proven, in mesenchymal tumours of the breast.[1-7] However, Al-Beena *et al*. in his review article advised to consider chemotherapy and radiotherapy to improve local recurrence especially in cases where the tumour is larger than 5 cm and also where histology shows positive surgical margins.[8] On the other hand, in some studies, role of chemotherapy in breast sarcoma was not found to be of any significant benefit.[9] Breast sarcomas are also non-responsive to the hormonal treatment as they lack hormonal receptors.[10]

Surgery is the main treatment modality for this disease and, therefore, a complete excision of the lesion with free margins should be the goal. Axillary lymph node dissection is not mandatory but will need further studies with long follow-ups before it may possibly become standardized. More trials are to be encouraged by the oncologists regarding radiotherapy and chemotherapy.

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