



## RESEARCH LETTER

## MFH of Upper Extremity with Bilateral Breast Metastasis: A rare presentation

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The term MFH is used to describe a group of malignant soft tissue tumors with a fibrohistiocytic appearance. This entity is the most commonly diagnosed extremity sarcoma. MFH characteristically is a tumor of later adult life although it may occur in younger adults MFH usually presents as a painless mass, the most common site is the lower extremity followed by the upper extremity and the retro peritoneum MFH is placed under group 3 of Malignancy grouping of specific types of STS(1). The most common and serious event in patients with STS is haematogeneous metastases. The lung is the most common site of metastasis, but lesion can appear in bone and liver as well. Lymph node metastasis from STS are uncommon, occurring a fewer than 10% of patients at any time during the disease (2,3). Because of their infiltrative growth pattern STS have a marked tendency to recur locally.

Although the major site of metastasis in MFH is local, distant metastases is known to occur.

Because patient survival is largely determined by whether metastasis develops, the prognostic factors for survival are the same as those for metastatic relapse. The only factor other than grade and size that regularly correlates with metastatic relapse is tumor depth.

The frequency of metastatic deposits to the breast from all extra mammary neoplasms ranges from 0.4 to 2.0%. The common primary cancer sites which metastasize to the breast are cutaneous melanoma and neuroendocrine tumors such as oat cell and carcinoid tumor (4,5). However in children most common origin of breast metastasis was rhabdomyosarcoma(6).

The most common clinical presentation from a breast metastasis is a rapidly growing single movable lump,

frequently in the upper and outer quadrant of the (Left) breast(7,8). Fifty percent of patients have symptoms of breast pain, and discomfort(7). Bilateral breast involvement, as in our case is noted in only 8% of all breast metastasis(4). Axillary Lymphadenopathy is common and the reported rate is 25-85%.<sup>9</sup>

All the published data on metastatic breast cancer have indicated a poor prognosis. Metastases to the breast is a harbinger of widespread dissemination of the disease. Concurrent metastasis to the lung, liver & other subcutaneous tissue are frequently detected during the staging process(7,10). However, in our case, we found no evidence of distant metastasis elsewhere in the body.

In one review by Hajdu and Urban of 51 patients with metastasis to the breast 1/3<sup>rd</sup> of the patients had metastatic disease before they developed metastasis. Out of the remaining 2/3<sup>rd</sup>, all except three patients developed widespread metastasis rapidly despite various treatments(7). The median survival after the diagnosis of breast metastasis was 10 months and more than 80% of women died within one year. This was despite the fact that most patients in this series underwent surgery or received RT to the breast, and also received some form of chemotherapy.

60 years old female presented with complaint of swelling on ulnar aspect of distal forearm (R) wide local excision of the lesion was done. The patient presented to the Deptt. of Radiation Oncology, GMC, Jammu in September 2004. The post operative histopathology report revealed features of Malignant fibrous histiocytoma grade 3. All the resection margins were free of tumour. Her other metastatic work up revealed no evidence of distant metastasis. The patient was planned adjuvant XRT to

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(Right) forearm. She received a dose of 5000 CGY/25 # and treatment was completed on 25-10-2004. The patient was subsequently on regular follow-up.

The patient presented with multiple nodes right supra claviculer fossa. After 1<sup>1</sup>/<sub>2</sub> month She was planned for palliative XRT 4000 CG/20 # to (R) SCF and treatment was completed on 24-2-06. The patient reported after 3 months with the complaints of pain and swelling right axillary region. Her clinical examination revealed (R) Axillary lymph node mass 8x10cm and another hard and fixed swelling over ulnar aspects of (R) wrist 4x5 cm. Her other metastatic work up examinations were reported normal. The patient received palliative XRT to (R) Axilla 4000CG/20#. One month later patient started experiencing severe pain in the swelling over her (R) wrist.

The patient underwent surgery under orthopedic Deptt. in the month of October 2006 Disarticulation (R) shoulder was done and Histopathology was reported as MFH. After surgery within one month's time patient developed swelling and lump (R) breast. FNAC was reported as carcinoma breast but review of slides was reported as MFH. Patient was planned for palliative XRT to (R) breast 3000 CG/10#. After a month patient had swelling over (L) breast as well. She received XRT 3000 CGY/10 # over a period of 2 weeks. Her treatment was completed on 17.2.07. Simultaneously patient was started on palliative chemotherapy (in view of progressive disease) with VAC Regime. The patient was last seen in follow up OPD on 13-4-2007 when she received third cycle of chemotherapy. To summarize, we believe that MFH of extremity, metastasizing to Bilateral breast is

an uncommon / rare presentation. The patient has no evidence of metastasis to Lung, Bone, Liver, or any abdominal organ. The patient has been palliated well by Radiotherapy. Her general condition is preserved. Metastatic cancer to the breast carries a very poor prognosis and the Cornerstone of management is to achieve good palliation. An interesting lesson for the oncologist is to rule out secondary malignancy to the breast in every patient with a known malignancy, to avoid unnecessary mastectomies.

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