

A Rare Case of Multiple Soft Tissue Metastases from Carcinoma Breast

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ABSTRACT

We are presenting a case of multiple soft tissue metastases from carcinoma breast. 52 year old patient presented with multiple swellings situated over chest, abdomen, axilla, neck and forearm. The patient was giving past history of lumpectomy right breast 4 years back for which histopathological diagnosis is not available. Histopathology, FNAC and IHC confirmed the diagnosis as soft tissue metastases from carcinoma breast. Multiple soft tissue metastases from carcinoma breast even though is a rare occurrence, can present in an advanced stage of the disease as in our case.

Keywords: Multiple soft tissue lesions, metastasis, carcinoma breast.

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INTRODUCTION

Soft tissue metastasis from carcinoma is extremely rare occurrence. Only limited number of cases are available in literature.^[1,6,7,8,9] They may be easily mistaken for benign or malignant lesions of soft tissues. They may present as painless subcutaneous or painful intramuscular nodules.^[3] More so, primary sarcomas are more common among malignant lesions compared to metastasing carcinomas in soft tissues. The clinical distinction between primary soft tissue sarcoma and metastatic soft tissue carcinoma is very important because the treatment and prognosis are markedly different.^[2] Soft tissue sarcomas are often cured by wide resection and/ adjuvant chemo and radiotherapy whereas metastatic soft tissue carcinoma is mainly treated with radiotherapy and chemotherapy. They can also be mistaken for skin adnexal tumor

especially in cytological aspirations and when previous history is not available. Therefore histopathological examination and confirmation by IHC remains the mainstay of the diagnosis. We are presenting one such case of multiple soft tissue metastases from carcinoma breast.

CASE REPORT

A 52 year old female presented with multiple nodules with puckering of skin distributed each on anterior chest wall near right shoulder, in front of neck, axilla, on abdominal wall above the umbilicus and on the right forearm near elbow joint. The sizes of the swellings were ranging from 3 to 5 cm in diameter. Patient was giving past history of lumpectomy of right breast 4 years back but for which the histopathology diagnosis was not



Figure 1: Swelling right side of chest wall

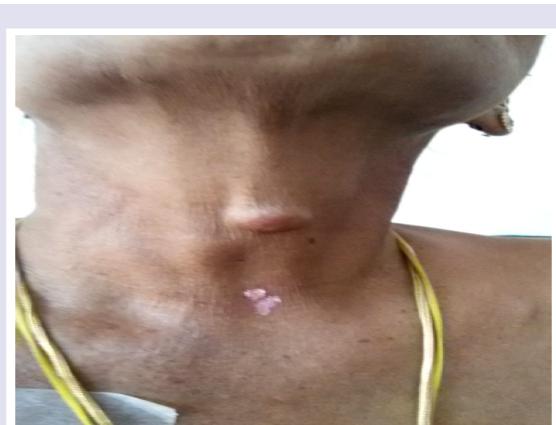


Figure 2: Swelling in front of neck



Figure 3: Swelling above the umbilicus

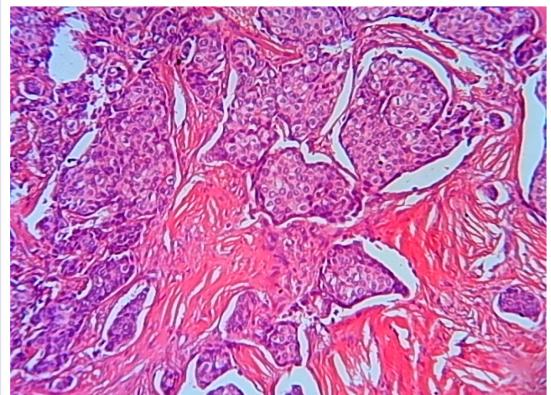


Figure 4: H&E(10x), Infiltrating duct cell carcinoma

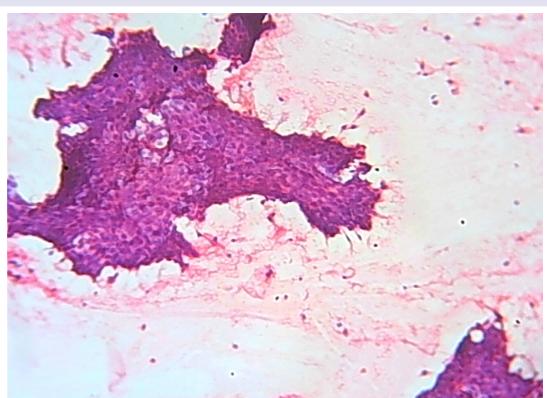


Figure 5: FNAC H&E (10x), Infiltrating duct cell carcinoma (Loosely cohesive sheets and singly scattered atypical ductal epithelial cells)

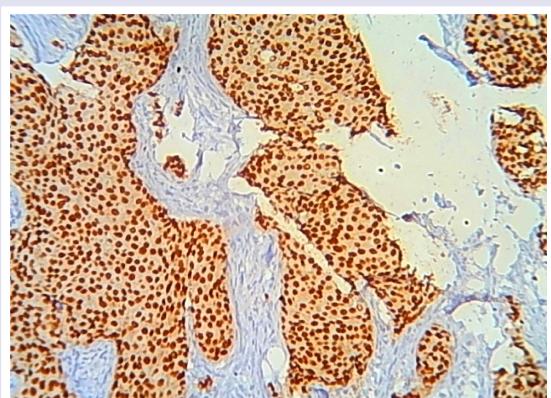


Figure 6: Immunohistochemistry(10x), Strong Positivity for Estrogen Receptor

available. Present MRI brain and spine showed possibility of multiple metastatic lesions.

Excision biopsy from swelling near right shoulder was sent for histopathological examination. We have received a grey brown soft tissue mass measuring 2x2x1 cm. Cut section showed a grey white lesion with irregular borders measuring 1.5x1.3cm.

Histopathological examination and retrospective FNAC from all lesions were consistent with infiltrating duct cell carcinoma probably metastasizing from breast carcinoma. Subsequently we have submitted the sections for immunohistochemistry for ER, PR and HER2 Neu which showed strong positivity for ER and negativity for PR and HER 2Neu.

DISCUSSION

Soft tissue metastasis from any carcinoma is very rare. It may be that direct extension from primary tumor is much more common than distant hematogenous spread. Several factors may be implicated for the rarity of this phenomenon such as change in pH, accumulation of metabolites and local temperature at soft tissue sites.^[1] Breast cancer is one of the most dreadful diseases worldwide even though many advanced treatment modalities have come forth.

Many patients survive long and the prognosis is excellent when the patient is treated early. But sometimes the disease may advance in spite of local wide excision and may spread rapidly to distant sites, locally and through hematogenous spread as in our case. Therefore, regular follow up and meticulous investigations are necessary for the long term benefits of the patient.

Limited literature is available for soft tissue metastasis from carcinoma.^[1,6,7,8,9] Plaza JA et al (2008) , reported a series of 118 patients out of which 13 were from carcinoma breast and out of these 3 were located on the back.^[4] Hyun Min Cho et al, (2010) reported a case of soft tissue metastases from breast cancer presenting as painless thigh mass.^[3] Another large series of metastatic soft tissue tumors by Tomoaki Torigoe et al (2011) reported 16 cases of metastasis from different primary malignancies.

Most cases reported were from skin, kidney, lung, colon, ovary or cervix as primary tumors with clear exception of breast cancer. They have also found that 9 cases were intramuscular and 7 cases were subcutaneous nodules located in different sites of the body like abdomen, back, thigh, chest, upper arm and buttock.^[2] Another case of soft tissue metastasis of breast carcinoma located on the back was reported by Seema Khanna et al (2013).^[1]

To our knowledge this may be the first case presenting as multiple soft tissue metastatic nodules all over chest, abdomen, neck, axilla and forearm. Soft tissue metastasis from breast carcinoma even though rare occurrence, can present in any course of the disease especially in the late stage of the disease as in our case. It can occur even after wide excision of the primary tumor and can present as a single or multiple lesions. Hence all soft tissue masses should be evaluated meticulously especially with or without past history of primary carcinoma.

The prognosis of multiple soft issue metastases form breast carcinoma is very bad and death may occur within a span of 5 months after the appearance of the lesions.^[1,3,5] Good nutritional support and palliative treatment may extend the life span of the patient. Proper care and emotional support to the patient all that is needed in such terminally ill patients.

CONCLUSION

All soft tissue masses should be evaluated histologically to confirm the diagnosis of soft tissue metastasis from carcinoma because clinically they may be mistaken for any other soft tissue sarcomas.

CONFLICT OF INTEREST

The authors declared no conflict of interest.

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