CASE REPORT

Extensive systemic and cutaneous metastasis – Extremely rare presentation of breast carcinoma

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Skin metastasis found in 0.7% to 10.4% of all patient with systemic malignancy. Cancers that have the highest propensity to metastasize to the skin include melanoma (45% of cutaneous metastasis cases) and cancers of the breast (30%), nasal sinuses (20%), larynx (16%), and oral cavity (12%) (2). Cutaneous metastasis is defined as a neoplastic lesion affecting the dermis or the subcutaneous tissue that originates from another primary tumor (3). 0.7-9% of patients with cancer develop skin metastasis, which is considered a rare dermatological event (4). Metastatic tumors are usually round, discrete tumor lobules in the dermis, with a Grenz zone, and are usually unassociated with the epidermis (5). Carcinoma may produce initial inflammatory response mimicking cellulitis. This pattern is referred as inflammatory breast carcinoma. Occasionally, patients with metastatic breast cancer have a firm, scar like area in the skin. When this occurs on the scalp, hair may be lost, and the clinical appearance may mimic alopecia areata, except that the skin exhibits marked induration on palpation. This condition, known as alopecia neoplastica (6).

A 36-year-old lactating woman with negative family history of neoplastic disease presented us with 1 year history of right breast lump, progress from small 2 cm nodule in right breast, remain static for another 9 months and then suddenly progresses to recent size of 15 × 15 cm with development of multiple skin swelling in abdomen, back, upper arm, and right thigh region simultaneously. These skin nodules are clinically mimicking lipoma. There is multiple mobile lump in left breast also mimicking fibroadenoma which are increasing in size and number in last 3 months. These swelling in skin and opposite breast are turn out to be metastatic nodules after histopathology report. After radiological examination metastatic nodules found in liver and spleen too. Mammography shows BI-RADS 5 in bilateral breast. Patient was put on neoadjuvant chemotherapy. First cycle of paclitaxel based chemotherapy was started after histological confirmation.

Key Words: Systemic metastasis; Cutaneous metastasis; Breast carcinoma; Systemic malignancy; Skin metastasis; Chemotherapy; Alopecia neoplastica

CASE REPORT

A 36-year-old lady with advanced primary ductal carcinoma of right breast (T4N1M1) stage 4 disease who presented us with 1 year history of right breast lump, progress from small 2 cm nodule in right breast, remain static for another 9 months and then suddenly progresses to recent size of 15 × 15 cm with development of multiple skin swelling in abdomen, back, upper arm, and right thigh region simultaneously. These skin swellings are clinically mimicking lipoma. There is multiple mobile lump in left breast also mimicking fibroadenoma which are increasing in size and number in last 3 months. These swelling in skin and opposite breast are turn out to be metastatic nodules after histopathology report. After radiological examination metastatic nodules found in liver and spleen too. Mammography shows BI-RADS 5 in bilateral breast. Patient was put on neoadjuvant chemotherapy. First cycle of paclitaxel based chemotherapy was started after histological confirmation.

Key Words: Systemic metastasis; Cutaneous metastasis; Breast carcinoma; Systemic malignancy; Skin metastasis; Chemotherapy; Alopecia neoplastica

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thigh and arm region showing malignant epithelial cell as seen in smears from breast swelling suggestive of metastatic subcutaneous deposits.

Tru cut biopsy also performed from the right breast lump. It is found to be triple negative invasive ductal carcinoma, NOS modified Nottingham grade- 3.

Bilateral mammography was done which shows BIRADS-5 in both breast. Skeletal survey done which include chest, spine, pelvis x-ray. These x-ray shows no bony metastasis. USG whole abdomen was done which shows multiple hypoechoic lesion in liver and spleen suggestive of multiple liver and splenic metastasis. USG findings are confirmed by CECT abdomen which shows multiple liver and splenic metastasis with mesenteric lymph node enlargement (Figure 3).

**DISCUSSION**

Carcinoma breast metastasizes mainly to the lungs, bones, CNS and liver (7). In a retrospective study of carcinoma breast with metastatic disease, it is reported that cutaneous metastasis from breast carcinoma accounted for 5% of cases (8). But in any case, report it is not found bilateral carcinoma breast with extensive cutaneous and systemic metastasis.

**CONCLUSION**

Therefore, in my opinion it is probably very rare case of carcinoma breast with such atypical course and findings of the disease.