Papules to Pseudovesicular Lesions over Chest: A Mirror to Breast Malignancy

Abstract

Here, we present a case of carcinoma telangiectoides in an unknown case of breast carcinoma presenting as multiple discrete to confluent, raised, solid, erythematous to skin-colored papules to plaques approximately 0.5–2 cm in size over an erythematous base over the chest. On the basis of clinical, histopathological, and immunohistochemical findings, a diagnosis of carcinoma telangiectoides was made. Diagnosis is difficult due to varying clinical presentations, but histopathology aids in the diagnosis. Through the present case, dermatologists should become aware of the diverse manifestations of cutaneous involvement of breast cancer. Early detection of cutaneous involvement may provide a window of opportunity for timely diagnosis and treatment of the primary tumor and prevent spread.

Keywords: Breast malignancy, carcinoma telangiectoides, cutaneous metastasis

Introduction

The incidence of cutaneous involvement in patients with malignancy is estimated to be 0.6-10.4%.[1] In women, breast cancer is the most frequent primary malignancy resulting in skin involvement (23.9%).[2] Metastatic disease of the skin accounts for only about 2% of all metastatic lesions,[3] and since it's so rare, the data on this are limited. In women, breast carcinoma is the most frequent cause. Cutaneous metastasis occurs on the anterior chest wall from either lymphatic spread or local spread. There are eight main clinicohistopathological types of metastatic breast cancer with cutaneous involvement: carcinoma en cuirasse, inflammatory, telengiectatic and nodular types of metastatic carcinoma, alopecia neoplastica, carcinoma of the inframammary crease, metastatic mammary carcinoma of the eyelid with histiocytoid histology, and Paget's disease.[4] Cutaneous metastasis is presented most commonly a few months or years after the primary diagnosis. It is rare that it occurs at the same time as the primary tumor or as the first manifestation of the disease. Cutaneous metastasis may mimic many benign etiologies clinically, hence making it difficult to diagnose, but histopathology plays a critical role in clinching the diagnosis. A high index of

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suspicion is needed to establish the correct diagnosis for such cases as a dermatologist can be the first point of contact for such a patient with malignancy presenting with an initial presentation of cutaneous metastasis. Here, we report a rather unusual presentation of carcinoma telangiectoides presenting as the first sign of malignancy.

Case Report

48-year-old female, laborer occupation, presented to the outpatient department of dermatology with a complaint of sudden eruption of rapidly growing asymptomatic, reddish, multiple, elevated lesions on her chest since 1 month. She gave a history of anorexia and significant weight loss. There was no history of itching, pain, bleeding, or pus discharge. There was no past history of malignancy. She was multiparous with no similar complaints in the family. On cutaneous examination, multiple discrete to confluent, raised, erythematous to skin-colored papules to plaques approximately 0.5-2 cm in size over an erythematous base were present over the chest [Figure 1]. There was no hepatosplenomegaly or lesions in cornea, eyelids, mucosa, palms, and soles. On further examination, hard, deep seated, fixed, immobile, nontender

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mass was palpated in both sides of breasts measuring 48×9 mm over left side and 35×9 mm over right side. The overlying skin was having peau d'orange appearance and on palpation, it was woody hard and unpinchable. No history of nipple discharge was present but retraction of nipple was visible. Bilateral axillary lymph nodes were palpable. FNAC and excisional biopsy from the mass were consistent with the diagnosis of invasive ductal carcinoma of the breast with no special type grade 3. Routine hematological and biochemical investigations were normal and serology was negative. Ultrasound sonography thorax revealed mild left-sided pleural effusion. A 4-mm punch skin biopsy from a solid papule over the chest revealed irregularly atrophied and hypertrophied spongiotic epidermis with vacuolar degeneration of the basal layer; superficial dermis shows capillary and lymphatic proliferation with mild perivascular and perilymphatic chronic inflammation, while deep dermis shows islands of metastatic pleomorphic malignant cells (marked by black arrow) separated by fibrocollageneous tissue and chronic inflammation [Figure 2]. Immunohistochemistry revealed atypical cells that were positive for estrogen receptor and progesterone receptor and negative for Her-2 neu receptor [Figure 3]. CT scan of thorax revealed multiple, ill-defined lytic lesions in D1 and L1 vertebrae and manubrium sterni, suggesting bone metastasis. Based on clinical and histopathological findings, a diagnosis of carcinoma telangiectoides was made. Patient was referred to oncology department for further palliative treatment.

Discussion

Cutaneous metastasis can be classified into three types. It can be precocious, that is, as the first indication of visceral cancer, or metachronous, that is, developing months or years after primary cancer is diagnosed, or synchronous metastases, that is, primary tumor and cutaneous metastases are diagnosed simultaneously as was seen in our case of breast carcinoma. Skin involvement indicates widespread internal spread and has poor prognosis as evidenced by the average survival time of 7.5 months following initial diagnosis of cutaneous metastasis.^[5] Metastatic breast cancer has been associated with three unusual lesions: carcinoma erysipelatoides, carcinoma en cuirasse, and carcinoma telangiectoides. Carcinoma telangiectoides present as multiple red papules and pseudovesicles. [6] The clinical presentation in our case was similar and mimicked primarily lymphangioma circumscriptum due to pseudovesicle-type presentation. Other differentials which have to be kept in mind are angiokeratomas and xanthomas. Histopathology is usually confirmatory as in our case. Once the diagnosis is confirmed, imaging modalities such as computed tomography, bone scans, and positron emission tomography are used to confirm the primary malignancy. Whether the patient has a known or unknown primary malignancy, the development of cutaneous metastases calls for a

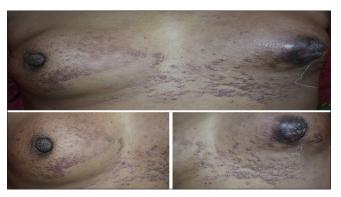


Figure 1: Multiple discrete to confluent, raised, solid, erythematous to skin-colored papules to plaques approximately 0.5–2 cm in size over erythematous base were present over the chest

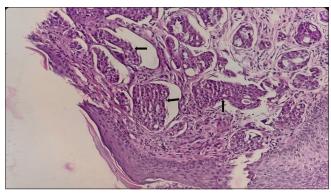


Figure 2: Irregularly atrophied and hypertrophied spongiotic epidermis with vacuolar degeneration of the basal layer, superficial dermis shows capillary and lymphatic proliferation with mild perivascular and perilymphatic chronic inflammation, while deep dermis shows islands of metastatic pleomorphic malignant cells (marked by black arrow) separated by fibrocollageneous tissue and chronic inflammation [H and E 20x]

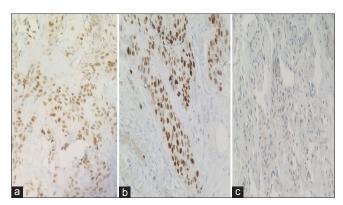


Figure 3: Atypical cells that were positive for estrogen receptor (a), progesterone receptor (b), and negative for Her-2 neu receptor (c) [Immunohistochemistry 10x]

multidisciplinary approach for the best welfare of the patient. Hence, we report this case for its diagnostic importance because it may be the first manifestation of an undiscovered malignancy. Here, the dermatologists play an important role as the primary point of contact for identification of cutaneous metastases which can then help to prevent further progression of the malignancy.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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