

## Carcinoma en Cuirasse: A Cutaneous Clue for Systemic Malignancy

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### DEAR EDITOR

Carcinoma en cuirasse is a dramatic presentation of metastasis from the breast, or less commonly from the stomach, kidneys, or lungs to skin, where carcinomatous lymphatics result in extensive thickening, edema and fibrosis of dermis, and subcutis of chest wall.<sup>[1]</sup> Breast cancers are responsible for more than two-thirds of skin metastasis in women and make a variety of morphologies. A peau d'orange appearance of skin overlying the tumor due to the invasion of lymphatics with lymph edema as well as distortion or dimpling of overlying skin are common presentations.

A 52-year-old lady, who was admitted with left-sided pleural effusion for evaluation, was referred from the Department of Chest and TB to the Dermatology Outpatient Department. She gave history of asymptomatic skin lesions over the left breast and back of trunk, of 2 months' duration. She also gave history of anorexia and weight loss.

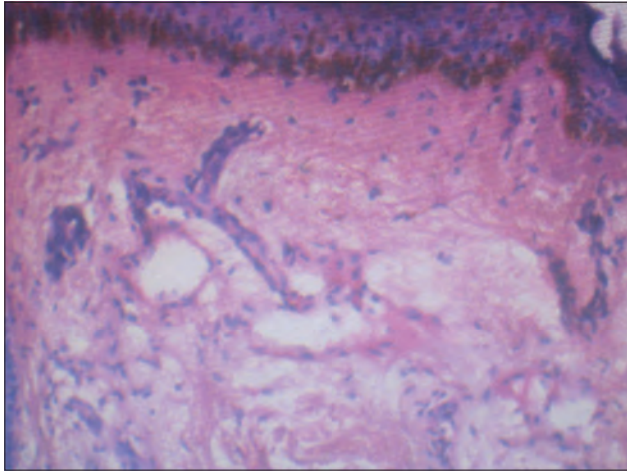
Physical examination revealed erythematous, indurated, non-tender plaque involving the entire skin overlying the left breast. There was peau d'orange appearance of skin [Figure 1]. Nipple was retracted, but there was no discharge from it. In addition, patient also had erythematous-pigmented plaques over the left supraclavicular area of neck and back of the trunk. Local lymph nodes were not palpable. Right breast was normal.

The patient was investigated and blood glucose and serum electrolytes were normal. Level of Erythrocyte sedimentation rate was raised. Chest X-ray showed non-homogeneous opacity on the left side of chest with obliteration of costo-phrenic angle. Ultrasonography of thorax confirmed left side pleural effusion. Examination of pleural fluid showed findings suggestive of malignancy. We made a provisional diagnosis of 'carcinoma en cuirasse'.

Biopsy of skin nodule showed the presence of tiny foci of groups of malignant epithelial cell, suggestive of cutaneous deposits of ductal carcinoma [Figure 2]. Fine needle aspiration



Figure 1: Carcinoma en cuirasse of breast



**Figure 2:** Histopathology of tiny foci of malignant epithelial cells

cytology from the plaque over the left suprascapular area also showed similar changes.

Carcinoma en cuirasse is a form of metastatic cutaneous carcinoma. It is usually seen in patients with carcinoma breast who have undergone mastectomy, but rarely this can be the primary presentation of carcinoma breast. The incidence of cutaneous metastasis varies from 6% to 10%.<sup>[2]</sup>

Cutaneous metastasis presents most often, a few months or years after the primary has been diagnosed. It is of diagnostic importance because it may be the first manifestation of hitherto undiscovered internal malignancy (as in our patient) or first indication of an inadequately treated malignancy.<sup>[2]</sup> Fibrotic type of cutaneous metastatic spread to the trunk is described as “encasement of armor” or carcinoma en cuirasse, due to the development of hard, leathery plaque.<sup>[3]</sup>

In a study by Mordenti *et al.*, among 164 cases of cutaneous metastasis from breast carcinoma, 131 patients presented with papules and/or nodules, 19 with telangiectatic carcinoma, 5 with erysipeloid carcinoma and carcinoma en cuirasse each, 3 with alopecia neoplastica, and 1 with zosteriform pattern.<sup>[2,4]</sup>

In a study by Lookingbill *et al.*,<sup>[5]</sup> among 7608 patients registered for tumor, 4020 had metastasis. Cutaneous metastasis was detected in 420 patients.<sup>[5]</sup> Skin metastasis was observed as first sign of extra-nodal metastatic disease in 306 patients.<sup>[5]</sup> Among 11 patients in whom the skin was first site of

extra-nodal metastasis from lung, the metastases were remote in 9 of them.<sup>[5]</sup> In another study by Lookingbill *et al.*,<sup>[6]</sup> 7316 patients with tumor were registered. Among 1223 tumor patients with lung involvement, 21 (0.7%) were with skin involvement.<sup>[6]</sup> Four patients (0.3%) presented with skin involvement.<sup>[6]</sup> In three patients, biopsy of the skin metastases lesions led to the diagnosis of carcinoma.<sup>[6]</sup>

As ca breast with skin metastasis is usually associated with advanced cancer, it foretells poor prognosis and hence, carcinoma en cuirasse, too has bad prognosis. At times, it may be the early or sole manifestation of the malignancy. In such cases its identification may play an important role in prevention of further metastasis and initiation of treatment.

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