

CARCINOMA ERYSIPELOIDES MIMICKING RADIATION DERMATITIS - A CASE REPORT AND REVIEW OF LITERATURE

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Abstract

Carcinoma erysipeloïdes (CE) is a relatively rare variant of cutaneous metastasis more often observed in breast cancer than in other carcinomas in women. Clinically, it appears as a well-defined, warm and tender inflammatory erythematous plaque, thus mimicking Erysipelas, Cellulitis or post mastectomy complications of lymphedema and acute radiation dermatitis. We report a case of CE in a woman previously treated for infiltrating ductal carcinoma by modified radical mastectomy, chemotherapy and radiotherapy. An early and accurate differential diagnosis of this disease gives the opportunity to diagnose and halt the systemic spread of the cancer.

Key words: Inflammatory metastatic cancer; cutaneous metastasis; breast cancer

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Introduction

Carcinoma erysipeloïdes (CE) is an uncommon cutaneous metastasis arising from visceral carcinoma [1]. It is the result of spread of tumor cells along deep dermal lymphatic vessels. It is a sign of advanced cancer or cancer recurrence. It is most often associated with breast carcinoma but may be observed in the course of some other malignancies.

Case Report

A sixty-one year old female, a known diabetic, was diagnosed as a case of carcinoma left breast with secondaries in left axilla since one and a half years. The Surgical record revealed that she underwent Modified Radical Mastectomy. The tumor was 5*3cm in size. Histopathologically, it was diagnosed as infiltrating ductal carcinoma with metastatic deposits in 10 out of 12 nodes and margins of skin, nipple & areola free of tumor. As the patient did not report for follow-up, so there was a gap of six months between surgery and chemotherapy. She was given six cycles of chemotherapy in the form of Cyclophosphamide 1g, Adriamycin 100mg and 5-Fluorouracil 1g. It was followed by twenty-five fractions of radiotherapy with a total tumor dose – 5000 c Gy in a span of five weeks. On a follow-up visit in the Radiotherapy Unit after

six months, she was referred to the Department of Dermatology for erythematous lesions over the irradiated area. On mucocutaneous examination, the afebrile patient had an operative scar which was seen extending from sternum to the left axilla. Lesion was in the form of erythematous plaque of size 12”* 10” with ill-defined and irregular margins extending from the left clavicle to epigastrium and left hypochondrium. It was interspersed at places with superficial ulcers and brown colored adherent crusts with few erythematous papules present at the periphery (Fig. 1). On palpation, entire plaque was slightly warm and tender without any induration. Hematological investigations were within normal range. Histopathological examination revealed nodular infiltrates of neoplastic cells within the reticular dermis and within the lymphatics in the upper and mid dermis (Fig. 2). Thus, the diagnosis of cutaneous metastasis with lymphatic spread was made. She was put on chemotherapy Inj. Ifosfamide 2 g and Inj. Vinorelbine 40mg.

Discussion

Cutaneous metastatic carcinoma is an unusual clinical diagnosis with an overall incidence varying from 0.7% to 10% [2]. In women, it occurs most commonly in breast cancer in contrast to men, where it occurs most often in melanoma [3].



Figure 1. Erythematous plaque with ulcers, crusts and papules in the left mammary region.

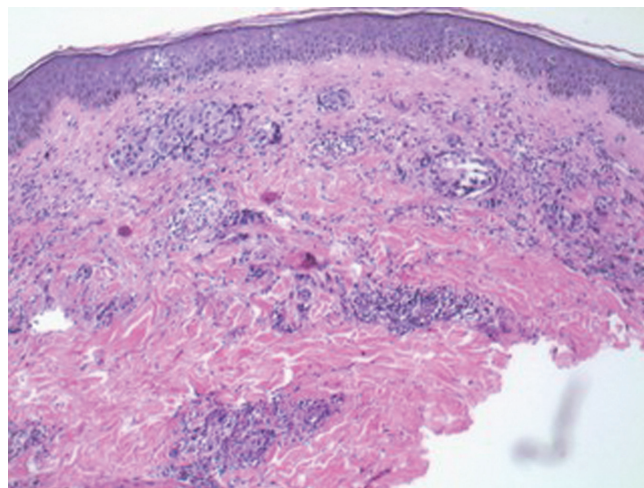


Figure 2. Nodular infiltration of neoplastic cells in reticular dermis and within the lymphatics in the upper and mid dermis.

In a retrospective study, various morphological patterns of cutaneous metastasis from breast carcinoma have been described like nodules/papules (80%), carcinoma telangiectoides (11%), carcinoma erysipeloides (3%), encuirasse carcinomas (3%), alopecia neoplastica (2%) and zosteriform (0.8%) [2].

CE was first described in 1924 by Lee and was named so by Rasch in 1931 because of its similarity to erysipelas [2]. It is a relatively rare variant of cutaneous metastasis (2-3%). Although most commonly associated with breast cancer, it can rarely be observed with other malignant tumors such as adenocarcinomas of pancreas, rectum, ovary, parotid gland and lung [4].

It can be either a primary or secondary (after treatment of primary carcinoma) with secondary being a commoner presentation [1]. It can occur after chemotherapy, radiotherapy, lymphadenectomy or tumor excision surgery of primary breast carcinoma. It has been suggested that these therapies lead to shedding of metastatic cells into subepidermal lymphatics leading to blockage of lymph ducts [5,6].

Clinically, it appears as a well-defined, warm and tender inflammatory erythematous plaque, thus mimicking erysipelas. The most common site involved is anterior chest wall. The other less common involved sites are contralateral breast, incision scar arms and facial skin [4]. In this case; the lesions were situated on the anterior chest wall and covered both above and below the operative scar suggesting the direct spread from the carcinoma breast.

CE is usually associated with intraductal breast carcinoma and is often considered a marker of tumor recurrence with ominous prognosis [3]. The metastasis occurs due to a rapid spread of tumor along subdermal lymphatic vessels leading to blockade and erythema [7].

Clinically CE should be differentiated from other benign dermatological diseases i.e. contact dermatitis, erysipelas, cellulitis or post mastectomy complications of lymphedema, acute radiation dermatitis. The infectious processes were ruled out in this patient because of absence of fever, leukocytosis, neutrophilia and persistence of lesions even after a course of antibiotics [8].

Acute radiation dermatitis usually appear during or with in a period of three months after radiotherapy and tend to resolve soon after the completion of treatment [1] Histopathological examination was also not suggestive of flattening or loss of

epidermal rete ridges along with edema or sparse connective tissue beneath the epidermis which are the common findings seen in acute radiation dermatitis.

Although, as reported, the cutaneous metastasis of breast carcinoma are discovered long after the diagnosis of primary tumor with an average time interval of 2.93 years [9]. In this case, it's diagnosis in early stages can be attributed to a delay in chemotherapy cycles which may have led to early spread of disease to the lymphatics.

To conclude, although it is a rare presentation but can have grave prognosis. So early diagnosis with the help of skin biopsy is important to differentiate it from radiation dermatitis as in this case, so that antimitotic therapy may be instituted early for better prognosis.

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