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(CASE REPORT)

When the Skin Becomes Armor: Carcinoma En Cuirasse revealing breast cancer progression

Yosra Ben Kraiem *, Hyba Taounza, Mariame Meziane, Karima Senouci and Laila Benzekri

Department of Dermatology-Venereology, Ibn Sina University Hospital, Mohammed V University, Rabat, Morocco.

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Abstract

Carcinoma en cuirasse is a rare form of cutaneous metastasis associated with advanced breast cancer, characterized by diffuse sclerodermoid induration of the skin. We report the case of a 50-year-old woman treated for invasive ductal carcinoma of the left breast, who presented seven years later with pulmonary metastases and a progressively evolving erythematous, indurated plaque of the anterior chest wall, associated with infiltrated papules and a peau d'orange appearance. Skin biopsy showed infiltration of the dermis and hypodermis by malignant epithelial cells arranged in cords and trabeculae within a fibrous stroma. Immunohistochemistry confirmed metastatic invasive ductal carcinoma, with strong positivity for GATA3, E-cadherin, and estrogen receptors in approximately 90% of tumor cells, consistent with a grade II invasive ductal carcinoma (Elston and Ellis classification). Carcinoma en cuirasse is a rare but characteristic manifestation of breast cancer progression that frequently mimics benign dermatoses or post-radiotherapy changes, and its diagnosis relies on histopathological examination. This case underscores the importance of recognizing cutaneous metastases in patients with a history of breast cancer, since their presence signals advanced disease and carries significant implications for management.

Keywords: Breast Cancer; Carcinoma En Cuirasse; Cutaneous Metastasis; Histopathology; Invasive Ductal Carcinoma; Sclerodermiform Plaque

1. Introduction

Carcinoma en cuirasse (CeC) is a rare and distinctive form of cutaneous metastasis, most commonly associated with breast cancer. It is characterized by diffuse, indurated, and sclerodermoid infiltration of the skin and subcutaneous tissue, giving it a characteristic "armor-like" appearance. This entity typically occurs in the setting of advanced or recurrent disease, often several years after initial treatment of the primary tumor. Owing to its polymorphic clinical presentation, CeC may be mistaken for benign dermatological conditions, leading to delays in diagnosis. We report a case of carcinoma en cuirasse revealing progression of breast cancer, highlighting its clinical, histopathological, and diagnostic features [1,2].

2. Case Presentation

A 50-year-old woman had been followed since 2015 for invasive ductal carcinoma of the left breast. Initial management included surgery, chemotherapy, radiotherapy, and adjuvant hormonal therapy.

Seven years after the initial diagnosis, disease progression was noted with the development of pulmonary metastases. The patient subsequently presented with a progressively evolving cutaneous lesion of the anterior chest wall. Clinical examination revealed a poorly defined erythematous, indurated plaque associated with multiple infiltrated, firm,

* Corresponding author: Yosra Ben Kraiem.

painless papules and a characteristic peau d'orange appearance (Figure 1). Bilateral axillary lymphadenopathy was also noted, in a context of general condition deterioration.

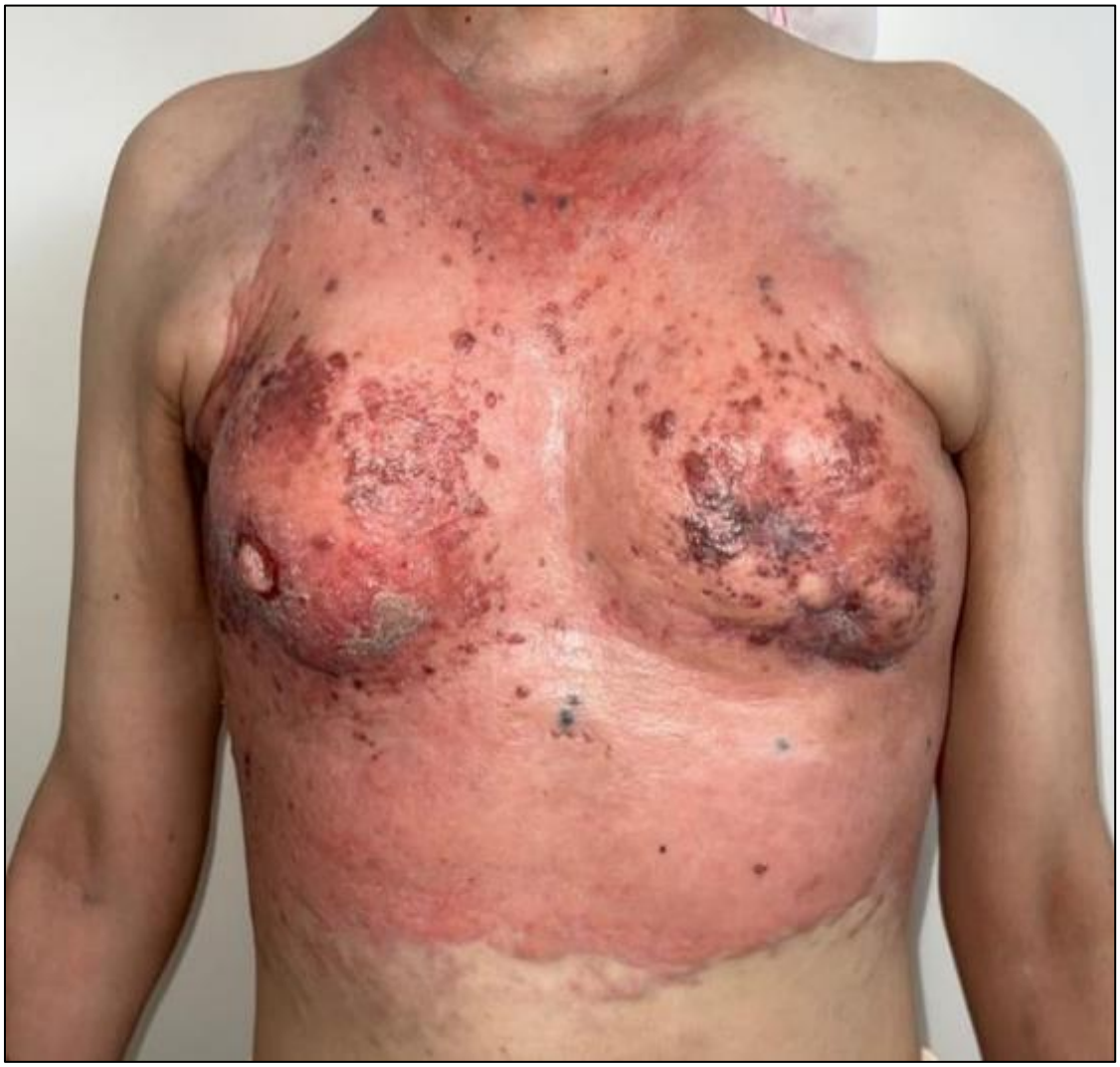

Figure 1 Carcinoma en cuirasse of the anterior chest wall.

A skin biopsy was performed. Histopathological examination showed a preserved epidermis overlying a dermis and hypodermis infiltrated by malignant epithelial cells arranged in cords and trabeculae within a fibrous stroma. The tumor cells exhibited marked nuclear atypia with occasional mitotic figures (Figure 2).

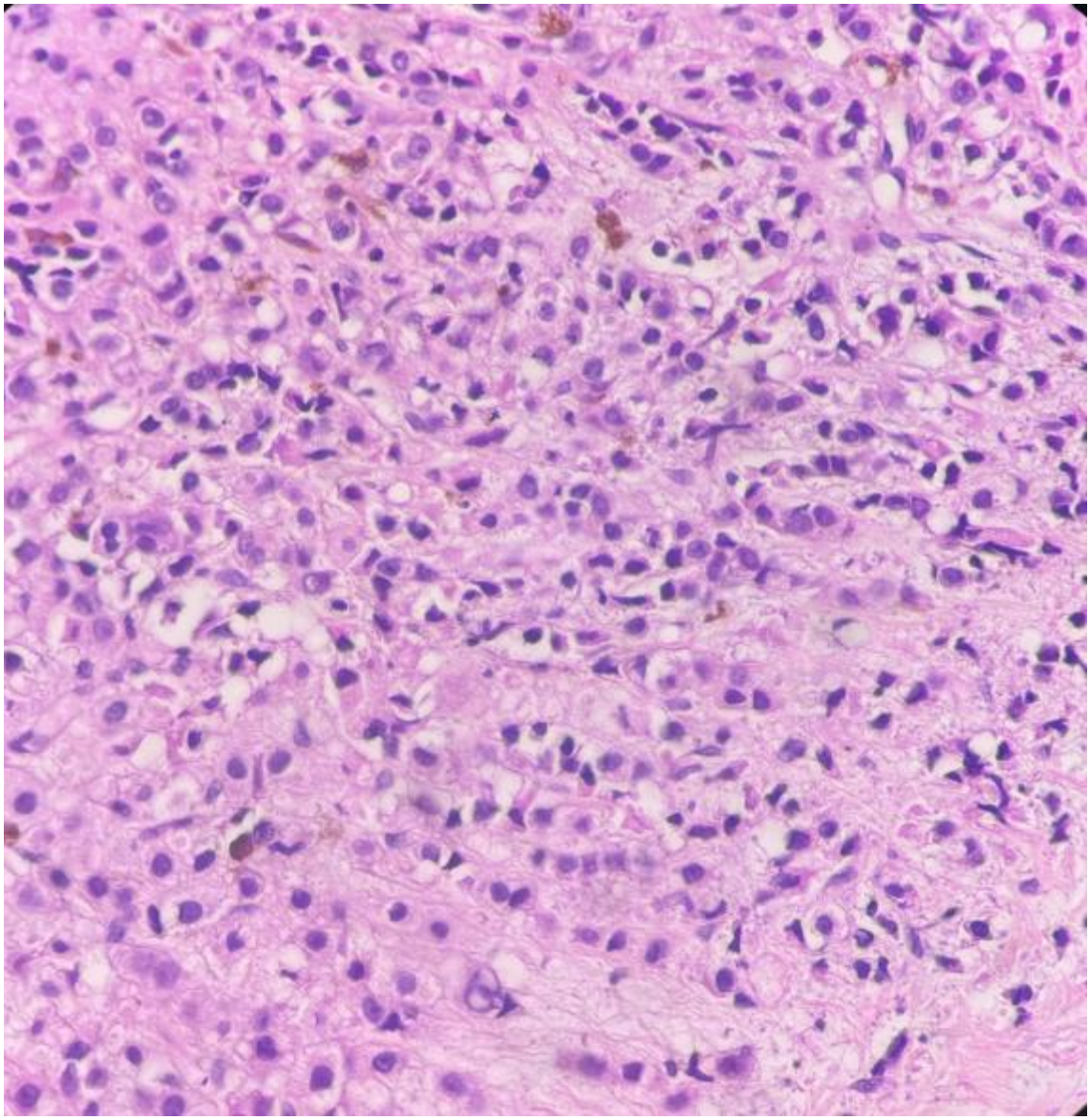

Figure 2 Histopathological examination showing a preserved epidermis overlying a dermis infiltrated by malignant epithelial cells arranged in cords and trabeculae within a fibrous stroma, with marked nuclear atypia.

Immunohistochemical analysis revealed strong positivity for GATA3, E-cadherin, and estrogen receptors, with intense staining in approximately 90% of tumor cells (Figure 3). These findings were consistent with cutaneous metastasis of a grade II invasive ductal carcinoma according to the Elston and Ellis classification. The patient was referred to an oncology center for multidisciplinary management.

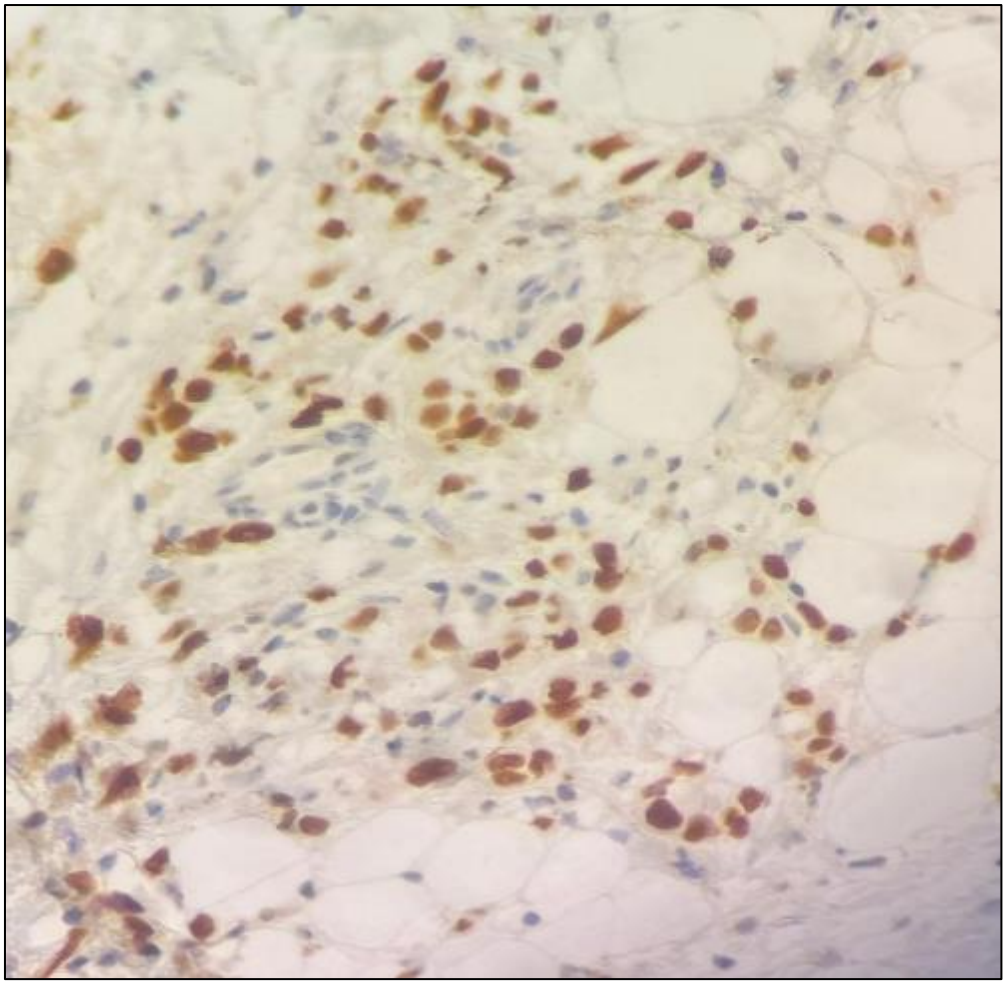

Figure 3 Immunohistochemical staining demonstrating strong positivity for GATA3, E-cadherin, and estrogen receptors in tumor cells, supporting the diagnosis of cutaneous metastasis of breast carcinoma.

3. Discussion

Cutaneous metastases occur in approximately 0.7% to 10% of all cancer patients, with breast carcinoma being the most common primary tumor in women. Carcinoma en cuirasse represents a rare subtype, accounting for approximately 3-6% of cutaneous metastases associated with breast cancer [3,4].

Clinically, CeC evolves through two main phases. The early stage is characterized by inflammatory changes such as erythema and edema, which may mimic conditions such as cellulitis, radiodermatitis, or inflammatory breast cancer. The late stage is marked by progressive induration and sclerosis of the skin, resulting from extensive stromal fibrosis and tumor infiltration, giving the typical “armor-like” aspect [5,6].

Histologically, carcinoma en cuirasse is characterized by malignant epithelial cells infiltrating the dermis and hypodermis within a dense fibrotic stroma. Tumor cells may be sparsely distributed and sometimes arranged in linear “Indian file” patterns, which can complicate histological interpretation. Immunohistochemistry plays a key role in confirming the breast origin of the metastasis, with markers such as GATA3, estrogen receptors, and E-cadherin being particularly useful [7,8].

The differential diagnosis includes post-radiation morphea, localized scleroderma, inflammatory breast cancer, and other forms of cutaneous metastases. Given the nonspecific clinical presentation, histopathological examination remains essential for accurate diagnosis [9].

The prognosis of carcinoma en cuirasse is generally poor, as it reflects advanced systemic disease. There is no standardized treatment, and management is mainly palliative, relying on systemic therapies such as chemotherapy,

hormone therapy, or targeted therapies depending on tumor characteristics. The primary goal is to control symptoms and improve quality of life [10].

4. Conclusion

Carcinoma en cuirasse is a rare but characteristic manifestation of advanced breast cancer. Its clinical polymorphism may lead to diagnostic delays, emphasizing the importance of maintaining a high index of suspicion in patients with a history of breast carcinoma who present with indurated cutaneous lesions. Skin biopsy remains the cornerstone of diagnosis, and early recognition by dermatologists is crucial, as it directly impacts patient management and prognosis.

Compliance with ethical standards

Disclosure of conflict of interest

The authors declare that they have no financial or non-financial conflicts of interest. No financial support was received from any organization for the submitted work, and the authors have no financial relationships, at present or within the previous three years, with any organization that might have an interest in the submitted work.

Statement of ethical approval

This case report did not require formal institutional ethics committee approval, in accordance with institutional policy for single case reports based on routine clinical care.

Statement of informed consent

Informed consent for treatment and for open-access publication of the clinical and histopathological data, including photographs, was obtained from the patient.

References

[1] Culver AL, Metter DM, Pippen JE Jr. Carcinoma en cuirasse. Proc (Bayl Univ Med Cent). 2019;32:263-265. doi:10.1080/08998280.2018.1564966

[2] Wang H, Bao C, Gong T, Ji C. Case report: carcinoma en cuirasse in a middle-aged woman mimicking postirradiation morphea. Front Oncol. 2021;11:747123. doi:10.3389/fonc.2021.747123

[3] El Faqyr L, Bendaouad L, Hocar O, Amal S. Deux cas de métastases cutanées en cuirasse. Ann Dermatol Venereol. 2019;146(12S):A174. doi:10.1016/j.annder.2019.09.241

[4] Alani A, Roberts G, Kerr O. Carcinome en cuirasse. BMJ Case Rep. 2017;2017:bcr2017222121. doi:10.1136/bcr-2017-222121

[5] Godbole M, Wani K, Zia S, Dabak V. Carcinoma en cuirasse: a rare but striking cutaneous manifestation of metastatic breast cancer. Cureus. 2023;15(6):e39838. doi:10.7759/cureus.39838

[6] Bandi S, Harshini C, Harsha TS, et al. Carcinoma en cuirasse in a middle-aged woman with a unique spoke-wheel presentation: a case report. SAGE Open Med Case Rep. 2024;12:1-3. doi:10.1177/2050313X241266496

[7] Boubnane I, Mehsas Z, Senouci K. Primary breast carcinoma en cuirasse: an exceptional presentation. Scholars J Med Case Rep. 2023;11(2):144-145. doi:10.36347/sjmcr.2023.v11i02.012

[8] Wei C, Long J, Yang T, et al. Case report: carcinoma en cuirasse—widespread cutaneous metastases from breast adenocarcinoma. Front Oncol. 2026;16:1742907. doi:10.3389/fonc.2026.1742907

[9] Ibrahim SA, Wallis LS, Reid DC. Carcinome en cuirasse. JAMA Dermatol. 2023;159(5):555-556. doi:10.1001/jamadermatol.2022.5934

[10] Volleamere A. Carcinoma en cuirasse: never give up. Eur J Surg Oncol. 2023;39(5):505. doi:10.1016/j.ejso.2013.01.194