

## Primary Breast Carcinoma en Cuirasse: An Exceptional Presentation

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**Abstract****Case Report**

Carcinoma en cuirasse is a rare form metastatic cutaneous that characterized by a diffuse sclerodermoid induration of the mammary area, the chest and the abdomen. It is preferentially associated with a local recurrence of breast cancer after mastectomy, radiotherapy or chemotherapy. However, it can rarely be the initial clinical sign of breast carcinoma. The authors describe an unusual case report of primary breast carcinoma en cuirasse.

**Keywords:** Breast carcinoma, carcinoma en cuirasse, skin metastasis.

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### INTRODUCTION

The term carcinoma en cuirasse is used to describe a rare form metastatic cutaneous that characterized by an armor-like, indurated plate. This name was first introduced in literature by Alfred Velpeau In 1838 [1]. Indeed, it presents as a diffuse sclerodermoid induration of the mammary area that may affect the chest and abdomen. Usually, this type of metastatic cutaneous is associated with breast cancer and more rarely with other carcinomas. We hereby report a case of primary breast carcinoma en cuirasse in order to underline the rarity of these metastases and to discuss the clinical presentations.

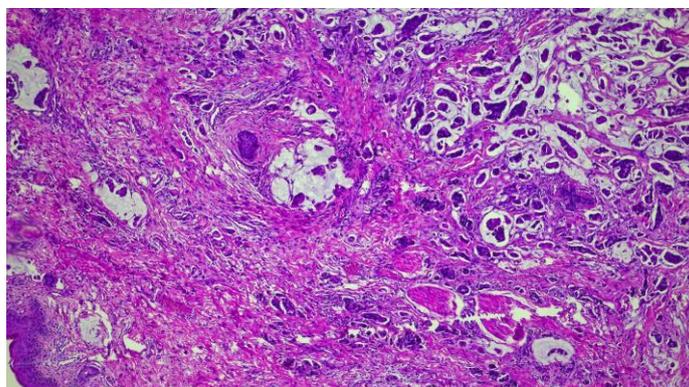
### CASE REPORT

A 42-year-old woman presented to our institution with an infiltrated and indurated erythematous placard of the trunk with dorsal extension evolving for 10 months. She denied any relevant concomitant diseases and her family medical history was marked by breast cancer. There was also progressive weight loss of 12 kg. At the time of examination, the lesions were ulcerating and very painful on the anterolateral aspect of the thoracic and abdominal wall and scattered with nodules on the back. There was total destruction of breast architecture (Figure 1). Examination of the lymph nodes revealed a painless left axillary lymphadenopathy of 1.5 cm.



**Figure 1:** Extensive, prominently indurated skin infiltration covering the anterolateral aspect of the thoracic and abdominal walls

A skin biopsy of the lesion was performed and histopathologic examination demonstrated a carcinomatous tumor process with a fibrous stroma and intravascular tumor emboli, compatible with a cutaneous metastasis of a breast carcinoma (Figure 2).



**Figure 2: Carcinomatous tumor process with a fibrous stroma and intravascular tumor emboli**

## DISCUSSION

Cutaneous metastases are relatively rare accounting for less than 2% of malignant skin tumors. Bronchopulmonary cancer accounts for 24-29% of skin metastases in men. Whereas, breast cancer is the most frequent cause (69%) in women [2].

Carcinoma en cuirasse is a rare presentation of breast cancer skin metastases that accounts for 6% [3]. It is preferentially associated with a local recurrence after mastectomy, radiotherapy or chemotherapy. However, it can rarely be the initial clinical sign of breast carcinoma. Alternatively, this cutaneous metastase has infrequently been linked to other visceral tumours such as gastrointestinal and lingual adenocarcinomas [1, 4].

Clinically, this tumor manifests as scattered, firm, papules and nodules overlying an erythematous cutaneous surface that may coalesce into a diffuse sclerodermoid plaque [5]. Moreover, the lesions can be pruritic, painful or rarely ulcerated. Typically, carcinoma en cuirasse affects the anterior aspect of thoracic and abdominal walls. Histologically, carcinoma en cuirasse is characterized by a dense dermal fibrosis with small clusters of atypical neoplastic cells [6].

The clinical differential diagnosis of this skin metastase can vary from inflammatory breast cancer, cutaneous infection, severe erosive Paget's disease of the breast to radiation dermatitis [7]. The definitive diagnosis is based only on biopsy and histologic evaluation.

There is no universal consensus on the optimal treatment of carcinoma en cuirasse and the options used are limited which included chemotherapy, skin graft,

Moreover, a thoracic-abdominal and pelvis computed tomography noted the presence of breast neoplasia with liver metastasis. Consequently, the patient was referred to oncology department for additional management.

local irradiation, non-steroidal antiinflammatory and hormonal antagonists [8].

## CONCLUSION

Our report illustrates an unusual form of cutaneous metastasis called carcinoma en cuirasse which can be the first clinical presentation of malignancy. Hence, the clinicians should be attentive to avoid diagnostic and therapeutic delay.

## REFERENCES

- Schwartz, R. A. (1995). Cutaneous metastatic disease. *J Am Acad Dermatol*, 33(2), 161-182.
- Strickley, J. D., Jenson, A. B., & Jung, J. Y. (2019). Cutaneous Metastasis. *Hematol Oncol Clin North Am*, 33(1), 173-197.
- Mordenti, C., Concetta, F., Cerroni, M., & Chimenti, L. (2000). Cutaneous metastatic breast carcinoma: a study of 164 patients. *Acta Dermatoven APA*, 9(4), 143-148.
- Siddiqui, M. A., & Zaman, M. N. (1996). Primary Carcinoma En Cuirasse. *J Am Geriatr Soc*, 44(2), 221-2.
- Rolz-Cruz, G., & Kim, C. C. (2008). Tumor invasion of the skin. *Dermatol Clin*, 26(1), 89-102.
- Mullinax, K., & Cohen, J. B. (2004). Carcinoma en cuirasse presenting as keloids of the chest. *Dermatol Surg*, 30(2), 226-228.
- Whitaker-Worth, D. L., Carlone, V., Susser, W. S., Phelan, N., & Grant-Kels, J. M. (2000). Dermatologic diseases of the breast and nipple. *J Am Acad Dermatol*, 43(5), 733-751.
- Reich, A., Samotij, D., Szczęch, J., Woźniak, Z., & Szepietowski, J. (2016). Carcinoma En Cuirasse as an Initial Manifestation of Inflammatory Breast Cancer. *Postepy Dermatol Alergol*, 33(2), 142-5.