

Breast carcinoma en Cuirasse - Case report*

Carcinoma de mama em couraça - Relato de caso

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Abstract: Cutaneous metastasis is a phenomenon that results from a tumor spreading via lymphatic or vascular embolization, direct implant during surgery or skin involvement by contiguity. The primary malignant tumor that most commonly metastasizes to the skin in women is breast cancer, which can be manifested through papulonodular lesions, erysipeloid or sclerodermiform infiltration, en cuirasse. We report the case of a female patient, 78 years old, with papular, scaly and confluent lesions in the right breast for one year, progressing to edema and skin infiltration, reduction of breast volume and plaque en cuirasse, and similar lesions in the contralateral breast and abdomen for four months. The pathological diagnosis was invasive ductal breast carcinoma with Paget-like foci, epidermal skin metastases and lymphatic embolization.

Keywords: Carcinoma, ductal, breast; Neoplasm metastasis; Skin

Resumo: A metástase cutânea é conseqüente à disseminação do tumor por embolização linfática, vascular, implantação direta durante cirurgias ou envolvimento da pele por contiguidade. Em mulheres, o tumor maligno primário que mais comumente metastatiza para a pele é o de mama, que tanto pode se expressar por lesões tumorais papulonodulares, infiltração erisipelóide ou esclerodermiforme, em couraça. Relatamos o caso de paciente do sexo feminino, 78 anos, apresentando lesões nodulares, descamativas e confluentes em mama direita, evoluindo com edema e infiltração cutânea, com redução do volume mamário e placa endurecida ilimitada. Invasão da mama contralateral e abdome ocorreram 4 meses após o início dos sinais. O diagnóstico histopatológico foi de adenocarcinoma ductal invasivo de mama com focos pagetóides epidérmicos e embolização linfática. Palavras-chave: Carcinoma ductal de mama; Metástase neoplásica; Pele

INTRODUCTION

Carcinoma en cuirasse is an unusual skin metastasis of breast cancer with diffuse carcinomatous cutaneous and subcutaneous infiltration that may affect the chest and abdomen, by extension. These metastases are often estimated at 0.7 to 9% and are the initial signs of the disease in 37% of men and six percent of women.^{1,2} Carcinomatous cells spread through intersti-

tial space, bloodstream or lymphatic vessels and generally occur as local recurrence after mastectomy.³ *Carcinoma en cuirasse* was first described by Velpeau in 1838, a description chosen because of its resemblance to the metal breastplate of a cuirassier. It has also been called scirrhous carcinoma, pachydermia and *Acarcine eburnee* by various authors.⁴

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CASE REPORT

About a year ago a 78-year-old black woman, housewife, born and resident in São Vicente, SP, presented with papulonodular lesions, scaly and confluent in the right breast, progressing to edema and skin infiltration, with marked reduction in breast volume, like a cuirasse (Figure 1). Four months ago she showed signs of contralateral breast and abdomen involvement, with enlarged, hardened and palpable lumps in the left breast. There was also gradual weight loss of 10 kg in the previous year, anterior cer-

vical and axillary lymphadenopathy, associated with lymphedema of the right arm. She denied any dermatological diseases and her personal history was unremarkable (Figure 2).

Histological examination showed epidermis infiltration with pagetoid neoplastic cells, some of them with clear cytoplasm and tumor emboli in lymphatic vessels (Figures 3, 4 and 5). The diagnosis was invasive ductal breast carcinoma with Paget-like foci, cutaneous metastases and lymphatic embolization.



FIGURE 1: Reduction of breast volume under hardened plaque, en cuirasse, on the right breast. Increase in left breast volume, associated with scaly and confluent papules



FIGURE 2: Right axillary lymphadenopathy in cachectic patient, associated with erythematous scaly plaque on the right breast infiltrated with abnormal volume

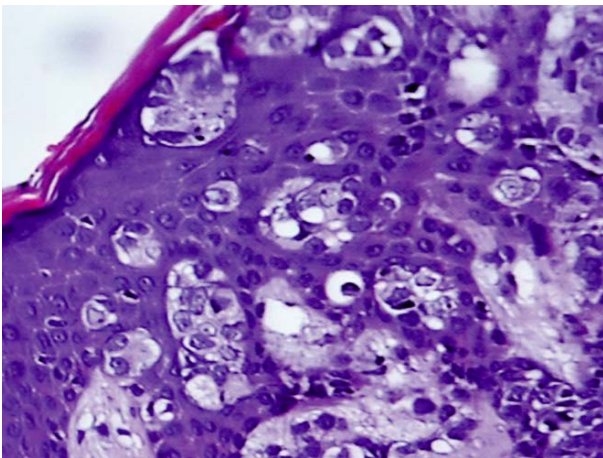


FIGURE 3: Pagetoid infiltration of neoplastic cells, few of them with clear cytoplasm in the epidermis

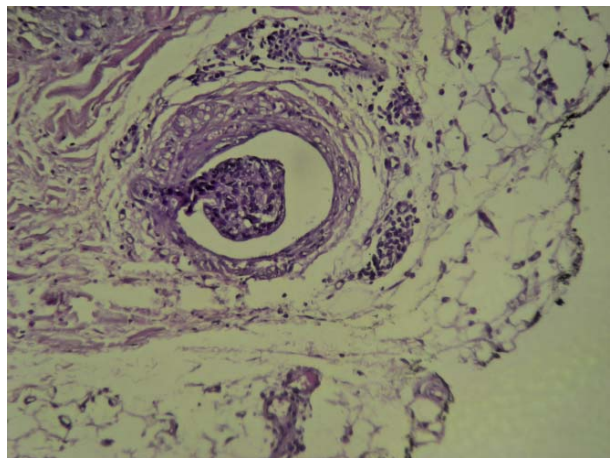


FIGURE 4: Tumor lymphatic embolization

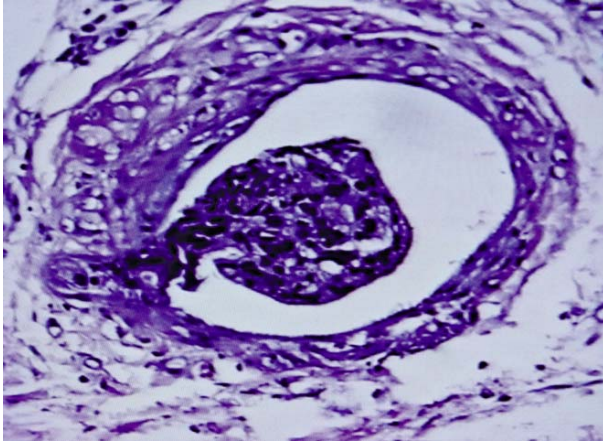


FIGURE 5: Tumor lymphatic embolization

DISCUSSION

Breast carcinoma is the most common malignant tumor that metastasizes to the skin: 69%, followed by the large intestine (9%), melanoma (5%), ovaries (4%) and cervix (2%).¹ Incidence among different cutaneous metastatic tumors correlates well with the frequency of their occurrence.⁵

Cutaneous breast cancer metastasis can be expressed with variable morphology: papulonodular lesions, erysipeloid or sclerodermiform infiltration. The interval between diagnosis of cancer and resultant metastasis is variable, but in general, when detected, it occurs within the first three years.⁶ Even rarer, but not less important, is cutaneous metastasis *en cuirasse* located on thoracic and abdominal walls characterized by infiltrated, hard and sclerodermiform plaque.^{7,8}

In this case, the patient was unaware of the seriousness of her disease, which caused skin manifestations *en cuirasse* to be the initial complaint. Prognosis of patients with skin lesions depends on the type and biological behavior of the primary tumor. Because breast carcinoma with skin metastasis is associated with advanced cancer, their prognosis is generally reserved and therapy often ineffective.

Cutaneous metastasis may be the first clinical internal unknown malignancy manifestation or the first cancer metastasis sign allegedly treated. *Carcinoma en cuirasse* is a rare form of breast cancer presentation, or even the initial presentation, therefore the primary responsibility of the dermatologist. □

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