CASE REPORT

Epidermoid carcinoma of the skin mimicking breast cancer*

Carcinoma epidermoide na pele da mama simulando câncer de mama

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Abstract: Nonmelanoma skin cancer is the most frequent cancer in the world. Squamous cell cancer often occurs in sun-exposed areas, such as the head and neck. When it involves the breast and ulce-rates, invading the glandular parenchyma, it may mimic breast cancer. Confirmation by means of histopathological examination, combined with clinical examination, is a critical instrument for the accuracy of the diagnosis. We report a case of an epidermoid carcinoma located on the breast skin, initially diagnosed as breast cancer.
Keywords: Breast neoplasms; Dermatology; Medical oncology; Neoplasms, squamous cell; Skin diseases; Skin neoplasms

Resumo: O câncer de pele não-melanoma é o câncer mais frequente no mundo. O carcinoma espinocelular ocorre mais frequentemente em áreas expostas ao sol como cabeça e pescoço. Quando o carcinoma espinocelular se desenvolve na região da mama, ulcerando e invadindo o tecido glandular, pode simular um câncer de mama. A confirmação histopatológica, aliada à história clínica, é ferramenta importante para o diagnóstico correto. Apresentamos um caso de carcinoma epidermóide da pele da mama diagnosticado inicialmente como câncer de mama.
Palavras-chave: Dermatologia; Neoplasias de células escamosas; Neoplasias cutâneas; Neoplasias da mama; Oncologia

INTRODUCTION

Nonmelanoma skin cancer is the most frequent cancer in the world. In Brazil, it accounts for 23% of all new cancer cases diagnosed.[1] Squamous cell carcinoma (SCC) is a malignant tumor of squamous cells of the epidermis characterized by rapid progression, as well as greater invasive and metastatic ability compared to basal cell carcinoma (BCC). SCC occurs more often on the sun-exposed areas, thus the breast region is a very uncommon site for this type of carcinoma.[2]

Generally, SCC begins as a small and hardened lesion, which may subsequently infiltrate widely and deeply due to its rapid growth.[3] The lesion may be

Received on 02.1.2012.
Approved by the Advisory Board and accepted for publication on 22.02.2012.
* Study carried out at the Federal University of Piaui (Universidade Federal do Piauí - UFPI) – Teresina (PI), Brazil.

Conflict of interest: None
Financial funding: None

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scaling, irregular, warty and erythemathous. When SCC involves the breast and ulcerates, invading the glandular tissue, it may mimic breast cancer. We report a case of an epidermoid carcinoma located on the breast skin, initially diagnosed as breast cancer.

CASE REPORT

A 55-year-old female patient presented a lesion on the right breast for two years and stated that initially it was only a small sore that did not heal. The lesion enlarged slowly during the two following years and rapidly in the past three months. At first, the patient did not seek medical attention because of hesitation. When she presented to the department, she had already undergone a biopsy of the lesion which revealed an undifferentiated carcinoma. Subsequently a mastectomy was planned, as it was considered as a breast cancer case. On physical examination, a large 15x10cm ulcerated lesion was observed on the right breast, extending from the upper portion of the junction of the upper quadrants to an area near the right clavicle, without evidence of invasion of the breast parenchyma (Figures 1 and 2). The axilla and the supraclavicular fossa had no suspected lymph nodes. Because of the clinical history, a diagnosis of breast skin carcinoma was considered, which was confirmed by a histopathological examination revealing epidermoid carcinoma T4N2M0. Chest radiography and abdominal ultrasound were unremarkable. Afterwards, a wide excision of the lesion with a 2cm margin was performed. A defect at the surgical field was left open for subsequent tissue grafting because of an infection observed intraoperatively. She had a good immediate postoperative course, and the skin grafting was scheduled. The definitive histopathological examination confirmed a moderately differentiated epidermoid carcinoma with free surgical margins. Six months later, she presented with a defective, but complete cicatrization. Currently, five years after surgery, she remains without evidence of ongoing disease.

Figure 1: Epidermoid carcinoma of breast skin

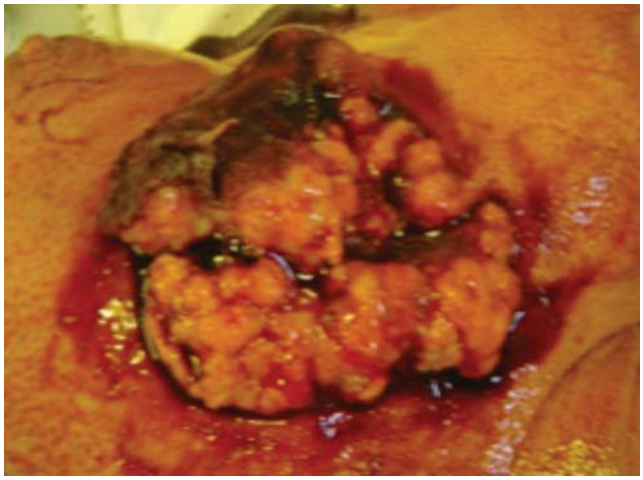

Figure 2: Exophytic lesion on breast skin

DISCUSSION

The most common location of malignancies that occur on the skin is the face; 80% of them arise above a line from the corner of the mouth to the ear lobe. Notwithstanding, other sites have been cited and reported, such as the scrotum, palms, buttocks, perineum, axilla, conjuctiva, nipple and areola.[4]

The occurrence of either primary or metastatic neoplasms on skin or in subcutaneous tissue of the breast mimicking breast cancer is a rare event. A review of 20 cases found that 14 lesions were benign and six were malignant.[5] In four cases of malignant lesions, the first manifestation occurred involving the breast and the histological diagnosis was essential to avoid unnecessary radical surgery. In this study, the malignant neoplasms were: three metastatic melanomas, one metastatic bronchogenic carcinoma and two lymphomas.

Only 21 cases of basal cell carcinoma of the nipple have been previously reported in literature, and only eight of these cases, in women.[6-8] The SCC located in the breast skin area is even less common. Loveland-Jones reported the first case of epidermoid carcinoma of the nipple after radiotherapy.[8]

When the patient presented to the department, she had already undergone a biopsy of the lesion, which revealed an undifferentiated carcinoma. Initially, it was treated as breast cancer, so she was scheduled for a mastectomy. However, on clinical examination a large and ulcerated lesion was noticed on the right breast, without evidence of invasion of the mammary parenchyma. Examination of the axilla detected no clinical sign of abnormality. Clinical history indicated, therefore, a diagnosis of breast skin carcinoma, which was confirmed by means of histopathological analysis.

Every lesion clinically suspected of being a SCC must be carefully assessed and a biopsy should be performed early, in order to achieve an accurate diagnosis. [9] Skin lesions in populations at increased risk may be difficult to evaluate clinically. Thus, a narrow threshold of criteria is necessary to perform biopsies of suspected skin lesions. Delay in diagnosis may cause the patient to need radical treatment, which is locally destructive, and to have a complicated surgical reconstruction. [3,10]

Aims of primary treatment of nonmelanoma skin cancers include cure of the tumor and maximal preservation of function and cosmesis. In order to achieve these goals, all decisions concerning the treatment should be individually planned considering particular factors of each case and the patient's preferences. [10] Surgical excision remains as the gold standard treatment, as it provides means for the histological examination of the entire tumor, and allows the surgeon to achieve tumor-free margins around the lesion and also to evaluate other prognostic factors, as perineural invasion. [3,10] In this case, the estimated rate of cure is almost 99% when the margins are tumor-free. The size of the margin depends on risk of recurrence, size and localization of the lesion, but it normally ranges from 4mm to 10mm. [4]

Differential diagnosis is extremely important, especially to define the management of the patient. Treatment of advanced cancer includes mastectomy with axillary lymphadenectomy combined with adjuvant chemotherapy. On the other hand, for cases of epidermoid carcinoma, wide excision surgery is recommended, and lymph node dissection is unnecessary in the majority of cases. It is indicated only for tumors presenting clinical evidences of secondary spread to axilla. Confirmation through histopathological examination has, associated with clinical history, a great relevance for the correct diagnosis. Therefore, it enables the patient to avoid undergoing inadequate procedures. ❑

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How to cite this article: Melo Neto B, Oliveira GP, Vieira SC, Leal LR, Melo Jr JAC, Vieira CF. Epidermoid carcinoma of the skin mimicking a breast cancer: case report. An Bras Dermatol. 2013;88(2):250-2.