

Case Report

A rare case report on cancer en Cuirasse of male breast

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ABSTRACT

Breast carcinoma in men represents approximately 1% of all breast cancers and 1% of all malignancies in men. The incidence of male breast cancer appears to be increasing. The risk increases with age, and the median age of diagnosis for men is later than that for women. There are several known risk factors for male breast carcinoma, including genetic predisposition, prior radiation exposure, alterations of the estrogen- testosterone ratio, and occupational hazards. 62 year old male came with chief complaints of papulonodular lesion over both breast which is progressive for the past one year associated with pain, itching and bloody discharge. Bilateral axilla on palpation had mobile, non tender, hard, multiple nodes in the anterior axillary and central group. FNAC from the node revealed metastatic carcinomatous deposits. Edge biopsy taken from the lesion revealed invasive breast carcinoma-no special type. 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 is breast cancer, which can be manifested through papulonodular lesions, satellite nodules, erysipeloid or sclerodermiform infiltration, en cuirasse.

Keywords: Cancer en Cuirasse, Male breast carcinoma, Cutaneous metastasis, Papulonodular lesion, Satellite nodules

INTRODUCTION

All of the histologic types of carcinoma identified in the female breast have been encountered in men, with invasive ductal carcinoma being the most common. Due to the absence of lobules in the normal male breast, invasive lobular carcinoma cases are seen infrequently. Bilateral breast cancer occurs in <2% of male patients with breast cancer.

The combination of mammography with targeted breast ultrasound can be used to diagnose male breast carcinoma and has been reported to have a high sensitivity and specificity. There are limitations to these techniques, particularly in the male breast; for example, benign disease such as gynecomastia can mask underlying malignancy. Additionally, as male breast cancer typically

occurs in an eccentric subareolar location, sonographic localization and evaluation of lesions can be complicated by the dense acoustic shadow of the nipple. Magnetic resonance imaging is being used in imaging the male breast.

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. 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 interstitial 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 scirrhus carcinoma, pachydermia.⁴

CASE REPORT

62 year old male came with chief complaints of papulonodular lesion over both breast which is progressive for past 1 year associated with pain, itching and bloody discharge. History of serous nipple discharge present. History of swelling in the bilateral axillary region. History of back pain for past 1 month. No history of trauma, fever, loss of weight or appetite. No history chest pain, cough with hemoptysis, jaundice, abdominal distension. Patient is a known case of type 2 diabetes mellitus on oral hypoglycemic agents for 2 years. He did not have any previous history of allergy. No history of any previous surgeries.

On examination patient well built and nourished. Local examination revealed multiple papulonodular lesion with ulceration with active serosanguinous discharge from the lesion over both breast with distortion of Nipple areolar complex. Satellite nodules present over the arms and abdomen. Skin not pinchable separately. Bilateral axilla had multiple non tender hard mobile nodes at anterior axillary and central group.



Figure 1: Clinical image.

FNAC from the lymph nodes showed metastatic carcinomatous deposits. CT chest showed multiple metastatic lesion over both breast with bilateral axillary nodes and CT abdomen was normal. Bone scan showed multiple bony osteolytic metastasis in dorsal vertebra and sacrum. Biopsy from the lesion revealed invasive breast carcinoma-no special type. Patient planned for palliative Radiotherapy and Chemotherapy.

DISCUSSION

Male breast cancer is a type of cancer that grows in a man's breast tissue. Although male breasts can't produce milk, they do have fatty tissue, ducts and breast cells.

Breast tissue in men is similar to young girls' breast tissue before they start puberty. Cancer develops when cells in these tissues grow uncontrollably, forming a tumor. Treatment for male breast cancer includes chemotherapy, radiation, surgery, hormone therapy and targeted therapy.

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%).⁵ Cutaneous breast cancer metastasis can be expressed with variable morphology: papulonodular lesions, satellite nodules, 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 Cutaneous metastasis en cuirasse located on thoracic and abdominal walls characterized by infiltrated, hard and sclerodermiform plaque.^{7,8}

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. Cutaneous metastasis may be the first clinical internal unknown malignancy manifestation or the first cancer metastasis sign. Carcinoma en cuirasse is a rare form of breast cancer presentation, or even the initial presentation.

Currently, there are no guidelines regarding screening mammography in asymptomatic men at any age due to the rarity of male breast cancer. Gynecomastia is an overdevelopment of the glandular tissue of the breast region in males. This is different from fat deposits in the breast, which are seen in obese men. Gynecomastia is seen in adolescent males during puberty and in older men. Coexistence of gynecomastia and ductal carcinoma has been reported.⁹ Treatment for male breast cancer depends on the histologic type of cancer as well as the degree of spread of disease at the time of diagnosis.

CONCLUSION

Carcinoma en cuirasse also known as scirrhus carcinoma, pachydermia, is a rare, aggressive form of cutaneous cancer metastasis with poor prognosis. It usually represents a tumor recurrence but occasionally it can present as an initial finding before diagnosis of a primary malignancy. The most common cancer to present is breast cancer. Also been rarely seen in the setting of primary lung cancer, gastrointestinal cancers, and genitourinary malignancies. Most commonly occurs on the anterior chest wall but occasionally has been reported to involve the abdomen. Cancer en cuirasse is described as encasing the body in breastplate armor (en cuirasse). It is characterized initially by small papules and nodules that coalesce to form indurated, sclerotic plaques. It can then progress to restrict movement of the chest wall and impede respiration. These skin findings may be

associated with pruritus, pain, bleeding, or a foul-smelling discharge.

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