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Case Report

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# Breast cancer masculine: Case report and Literature review.

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**Abstract**

Breast cancer in men has shown an increase in its incidence in recent years, represents up to 1% of cancers in males, and less than 0.1% of cancer deaths in this genre. The prevalence shows a rise at the end of the sixth and beginning of the seventh decade of life. Our objective was to present a case report of male breast cancer in a patient of 51 years of age, with no personal or family history of cancer, in which advanced invasive ductal carcinoma was diagnosed and a review of the literature, the characteristics clinical and radiological diagnostics.

## Introduction

Breast cancer in men (CMB) is rare, equivalent to less than 1% of cancers in men and only 1% of all breast cancers. The incidence of CMB has increased during the last three decades.[(1)]

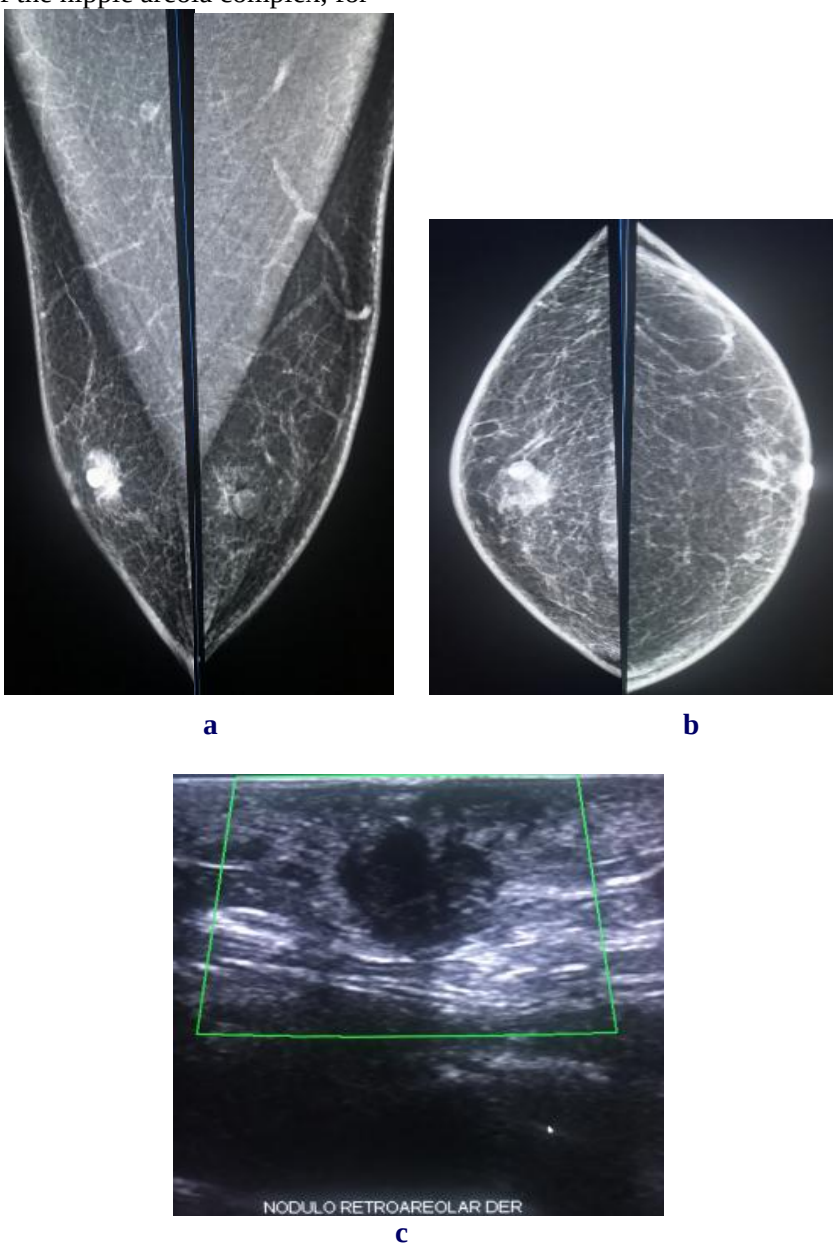
Breast cancer in men compared with breast cancer in women occurs later in life, with a higher stage, a lower grade and more positivity for the estrogen / progesterone receptor (ER / PR).[(2,3)]

Risk factors include 26% family history of breast or ovarian cancer, 29% have a personal history of cancer other than breast cancer and 14.5% are positive for BRCA1/2 mutations.[(4,5)] Most cases of CBM are ER and PR positive (90.8% and 83%, respectively), HER2 and Ki67 / MIB1 negative (84.2% and 61.7%, respectively) and have an intermediate / moderate tumor grade (G2) (52.4 %).[(6)]

Fat consumption and obesity[(7-9)] has been associated with certain cancers, including colorectal, breast and prostate cancers.[(7)]Exposure to electromagnetic fields has been postulated to contribute to the risk of male breast cancer, although the data are inconclusive.[(10,11)]

## Case Report

Patient of 51 years of age, of mechanical occupation, who went to the emergency room in December of 2017, with a clinical picture of 1 month of occasional mild dyspnea, pain in the right shoulder and back pain; Itching in the right areola complex of 10 years of evolution which in the last month ulcerated. Physical examination revealed periareolar tumor in the right breast with ulceration of the nipple areola complex, for which an approach was made for breast cancer. In January 2018, mammary ultrasound and mammography were performed, identifying a right retroareolar nodule with a malignant appearance, suspicious axillary adenopathies, which, according to the American College of Radiology, was classified as BIRADS 5 (Figure 1). so a biopsy of thenodule and axillary ganglion is performed. The histopathological study reports an invasive ductal carcinoma ER and PR positive, Her2Neu negative, Ki-67: 80% (Figure 2).

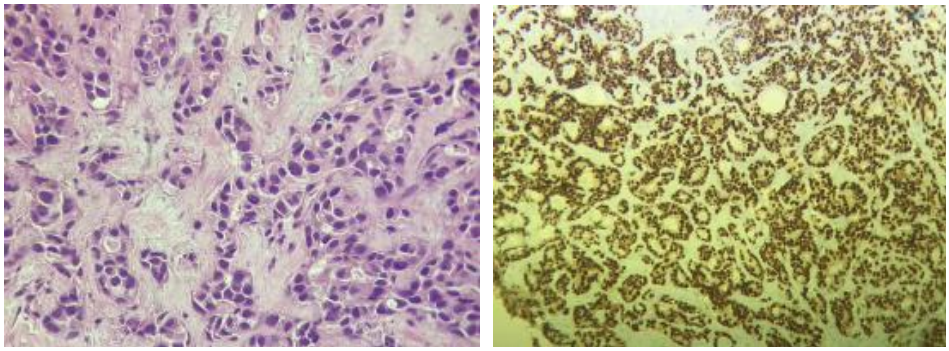



**a** **b**

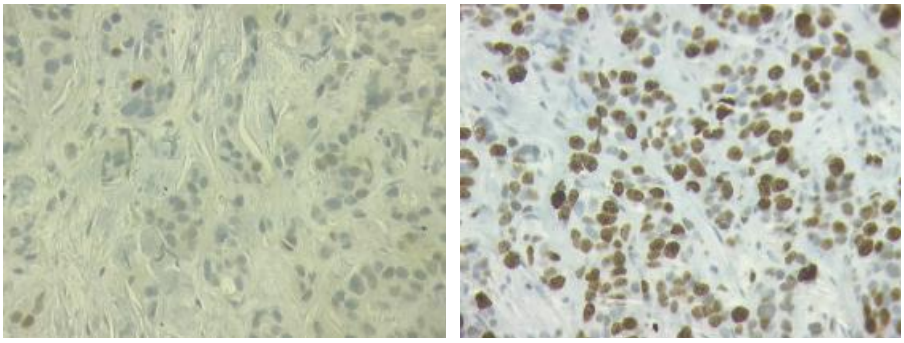
**c**

FIGURE 1. Mammography a) b) mid-lateral oblique and cephalocaudal projection, a retromamary, irregular nodule with a darkened margin and hyperdenseis observed in the right breast.

US features c) Irregular nodule, parallel orientation, uncircumscribed margin, undefined, posterior acoustic findings with mixed pattern, avascular to the application of color Doppler.



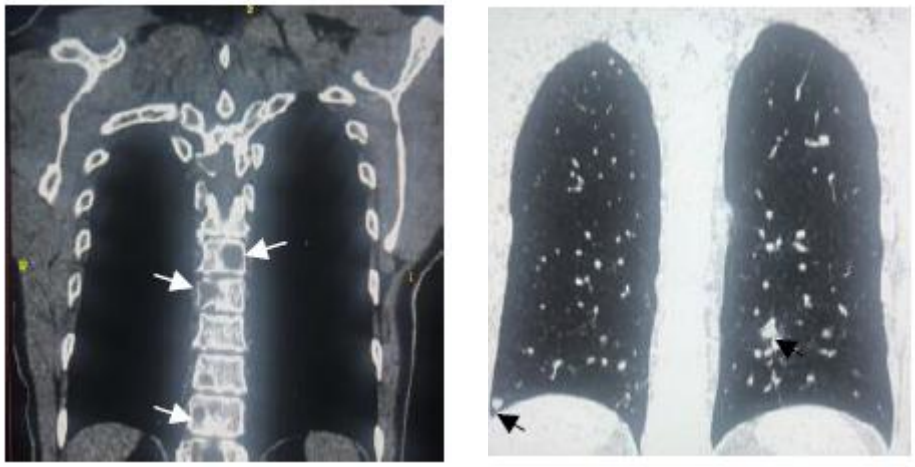
a b



c d

FIGURE 2. Histopathological study with immunohistochemistry reports. a) Histological cut. Hematoxylin eosin 200x.Positive estrogen receptors.b) PR positive, c y d) Her2-neu negative, Ki-67 80%respectively.

A simple computed tomography of the chest was requested in which lytic lesions were observed in the axial skeleton (spinal column, posterior costal arches and sternalmanubrium), as well as pulmonary nodules, hilar and mediastinal adenopathies compatible with metastasis. (Figure 3). Whole-body PET / CT with 18 FDG is requested for staging, in which axillary, mediastinal, retropancreatic, gastrohepatic adenopathies, axial skeletallytic lesions, bilateral pulmonary nodules are reported, all associated with abnormal hypermetabolism in relation to secondary deposits of the known primary, EC IV metastatic breast cancer is diagnosed and sent to palliative chemotherapy.



a b

FIGURE 3. a) Computedtomography of the thorax with window for bone in which lithic lesions are observed in multiple vertebral bodies of the thoracicspine. White arrows.
b). Computedtomography of the thorax with a window for the lung in which bilateral pulmonary nodules are observed, of dispersed distribution and in variable size. Black arrows.

Within the extension studies, tumor markers Ca 15.3 with a report of 151 U / ml (28/02/2018), Ca 15.3 with a report of 121 U / ml (03/14/2018) and 70 U / ml ( 03/28/2018).

He is currently on chemotherapy treatment with a Palbociclib plus Letrozoleregimen, 2 cycles, and external radiotherapy to pelvis 30 Gy in 10 fractions (5/10) was indicated.

## Discussion

In our case, the age of presentation was 51 years, in the literature were portan average age of 60 years with a variable range between 50 and 93 years[(1)]. The incidence, as in the female gender, increases with age and corresponds to less than 1% of male cancers, however, themortalityrateis similar to that of breast cancer in women, with a lower survival at 5 years because the diagnosis is made in more advanced stages of the disease. Clinically between 80 and 85% debut as a mass with progressive growth in the breast, not observed in our patient; These condmost frequent clinical finding is axillary adenomegaly (up to 42%), observed in our patient. Ulceration of the skin is the third most frequent clinical feature, up to 14% 2, this being the predominant clinical manifestation of our patient. The predisposing factors are estrogenic hyperstimulation either endogenous or exogenous, family history of the first degree with malignant mammary pathology, genetic factors such as the BCRA2 mutation present in 4 to 16% of the hereditary CMB[(4-6)], chromosomal abnormalities such as Klinefelter syndrome (47 XXY karyotype), alcohol consumption, repetitive radiological exposure before 20 years of age, workers exposed to high temperatures (thermal testicular damage and known carcinogens), obese patients.[(8,9)]

## Conclusion

Breast cancer in men in a rare entity, which usually goes unnoticed by society, due to the small reported cases, there are no large studies available to know the characteristics of this disease, so the current management is based on the extrapolation of what is known about breast cancer in women, why we consider it important, this is the case.

## Declarations

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