

Breast cancer in men. Case report

Cáncer de mama en hombre. Reporte de caso

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ABSTRACT

Breast cancer in men is a relatively rare entity that occurs in low proportion; however, its importance in men should not be ignored due to the poor prognosis since its diagnosis in late stages and its high mortality rate; paradoxically, more men have died from breast cancer than from testicular cancer. We present the case of a male patient with no previous history of importance, who went to the general surgery office for presenting retro areolar tumor and was referred to the oncological surgery office, where he underwent ultrasound, which was classified as a BI-RADS 5, so it was scheduled for surgical treatment. Due to the infrequency of this pathology, it was decided to report this case.

RESUMEN

El cáncer de mama en hombres es una entidad relativamente poco frecuente que se presenta en muy baja proporción, sin embargo, su importancia en hombres no debe ser ignorada debido al pobre pronóstico desde su diagnóstico en últimos estadios y a su alta tasa de mortalidad; paradójicamente más hombres han muerto por cáncer de mama que de cáncer testicular. Se presenta el caso de un paciente del sexo masculino sin antecedentes de importancia, quien acudió a la consulta de cirugía general por presentar tumor retroareolar, fue referido a la consulta de cirugía oncológica donde se le realizó ultrasonido, en el cual se catalogó como un BI-RADS 5, por lo que se programó para tratamiento quirúrgico. Por lo poco frecuente de esta patología se decide realizar el reporte de caso.

INTRODUCTION

Breast cancer is common in women but relatively rare in men, accounting for approximately less than 1% of all diagnosed cases.¹ According to epidemiological figures, between 1975 and 2015, its incidence was 40%, exceeding that of women by 25%.² It is usually observed in the last decades of life (60-70 years).

The most critical risk factor is a positive family history of breast cancer: the risk doubles if the history is positive for first-degree relatives and quintuples if other first-degree relatives are affected.³ Breast cancer in men occurs more frequently in estrogen receptor (ER)-positive patients.⁴ Neoadjuvant tamoxifen-based endocrine therapy has now been added as a treatment option for breast cancer in men.⁵

CLINICAL CASE

A 63-year-old female patient with a history of appendectomy seven years ago, fracture of the proximal humerus due to a gunshot wound, diabetes mellitus of seven years of evolution in treatment with biguanides and sulfonylureas, systemic arterial hypertension of seven years of evolution in treatment with ARA II, with no significant family history, who came to the consultation for an increase in breast volume of seven years of evolution, which was increasing progressively.

Physical examination revealed a painless mass measuring 4 × 5 cm, mobile, thickening and erythema of the skin, and negative axilla and supraclavicular fossa for adenopathy. Ultrasound was performed, which described a retro areolar lesion with an ovoid image

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antiparallel to the skin, hypoechoic with internal calcifications and lobulated margins; Doppler showed increased vascularity measuring $45.4 \times 45.8 \times 46.6$ mm, with an approximate volume of 50.7 cm^3 ; axillary region level 1 with 15×10 mm Doppler lymph node with peripheral vascularity, so it was classified as a BI-RADS 5.

According to the clinical picture and the findings during the ultrasound, it was decided to schedule a modified radical mastectomy of the Madden type; subsequently, a transoperative histopathological study was performed with a report of a fungating lesion suspicious for malignancy.

The histopathologic diagnosis was infiltrating ductal carcinoma without a specific pattern with areas of intraductal carcinoma of the comedocarcinoma type, high-grade central necrosis. The lymph node dissection of the right axilla was positive for ductal carcinoma metastasis in two of the 18 lymph nodes dissected.

DISCUSSION

In most males, cancer presents between 60 and 70 years of age (five to 10 years earlier than in women) with an average age of 62 years and is usually diagnosed in more advanced stages due to a delay in diagnosis.⁶ Some of the risk factors for the development of breast cancer in men are age, history of breast cancer in first-degree relatives (either male or female), hyperestrogenism, history of mediastinal radiation, history of exogenous estrogen use, genetic predisposition (BRCA1 or BRCA2 mutations, CHEK2, PALB2) and Klinefelter's syndrome.⁷ Studies have shown that hormone replacement therapy increases the risk of breast cancer, especially in the transgender population, especially in transgender women (male sex at birth and female gender identification), with a mean age of onset of 52 years.⁸

Infiltrating ductal carcinoma is the most common subtype of breast cancer in men; it usually presents unilaterally, fixed, and as a painless subareolar tumor mass, which may be the only symptomatology presented by the patient. It appears spiculated with irregular borders and, in up to 15% of cases, as a dense nodular mass with defined borders.⁷

At present, there is no prevention program. However, ultrasound should be considered the first-line imaging study due to its low cost and easy accessibility.⁹ In the ultrasound study, microcalcifications that are smaller in number, non-linear and thicker, compared to that of women, are present in up to 30% of cases. In the transgender population who have not undergone a mastectomy, they should be protocolized with mastography as preventive studies from the age of 50 if they have used hormone replacement therapy for more than five years.⁸

It has been observed that men with breast cancer have a survival disadvantage compared to women with breast cancer of up to 5 to 10 years due to their diagnosis in more advanced stages and to the primary site of the tumor, since in men, it occurs in the central area below the nipple, in addition to the fact that the histology of the tumor contributes to a worse prognosis than tumors located in the upper quadrant.

Today, it has been demonstrated that neoadjuvant endocrine therapy with tamoxifen should be the first choice and should be administered for an initial period of five years. Tamoxifen was considered the standard of treatment in premenopausal women with ER+ receptor-positive breast cancer and aromatase inhibitors in postmenopausal women, and given the similarity between breast cancer in men and cancer in postmenopausal women, aromatase inhibitors were used as a treatment for breast cancer in men; However, recent studies have shown a reduction in mortality in those who received tamoxifen compared to aromatase inhibitors, since the production of testicular estrogens is not abolished by the inhibitors, which leaves tamoxifen as the first treatment option. Unfortunately, there are side effects with the use of tamoxifen, which include reduced libido, weight gain, hot flashes, and mood alterations, as well as deep vein thrombosis, leading to a high dropout rate from treatment due to these side effects.

Another aspect to highlight is the scarce data on the psychological consequences of this pathology in the male population. Patients with breast cancer have an increased risk of obesity, comorbidities, reduced physical activity, poor quality of life, and deterioration

in health associated with depression or anxiety.⁵ The recommended study for follow-up and cancer detection in patients already undergoing curative therapy is ipsilateral mastography in patients with lumpectomy and annual contralateral mastography in patients with a history of breast cancer or genetic predisposition; genetic counseling should also be offered.¹⁰

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