

## LOCALLY-ADVANCED BREAST CANCER IN A MALE PATIENT: A CASE REPORT

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### Abstract

Male breast cancer is a rare pathology, representing 1% of the cases of breast cancer, and less than 1% of all cancers in men. It tends to be diagnosed at a later stage, and also at an older age, the mean being 67 years old. Little is known about the etiology of the disease, and the treatment approach is usually the same as in female breast cancer. We hereby present a case of a 63-year-old man with a locally-advanced breast cancer, complicated by skin ulcerations. The aim of this paper is to contribute to raising awareness for the disease and point out the fact that breast cancer behaves different in male patients.

**Keywords:** ulcerated, breast, cancer, male, mastectomy

### Introduction

Male breast cancer (MBC) is a rare disease, representing less than 1% of all cancers in males and almost 1% of all cases of breast cancer, being responsible for 0.1% of cancer deaths in men [1,2]. Among the histological types, the most common is invasive ductal carcinoma, ranging from 65 to 75%, the most predominant subtype being infiltrating ductal carcinoma. [3,4]. Men tend to be diagnosed at an older age than women, the mean being 67 years old [5].

In our experience, MBC tends to be diagnosed at a later stage too, and this can be due to many different reasons. First, due to its uncommon occurrence, little is known about the etiology of the disease, where hormonal, environmental and genetic factors are involved. Except the under-researched etiology, to this date, there are no prospective studies for clinical management of MBC. Also, awareness of male breast cancer in society is low, hence the common misconception that breast cancer is a women's disease. We hereby present a case report of a 63 year old man, who presented at our clinic with a locally advanced, ulcerated breast cancer.

### Case report

A 63 years old patient presented at our clinic, complaining of discomfort and noticeable changes on his left breast. On physical examination, an irregularly shaped large mass with skin ulcerations and redness was identified (figure 1).

The mass was associated with tenderness and local warmth. No palpable axillary or supraclavicular lymph nodes were identified during the initial assessment. The patient admitted that, having fear and anxiety of receiving a diagnosis of cancer as well as receiving surgical treatment, was the main reason for delay in seeking medical care. His overall health was good, with no significant prior medical history. Family history was negative for breast cancer and any oncological disease. On diagnostic imaging, no distant metastases were detected. Therefore, the patient was admitted for surgery. Left modified radical mastectomy was performed and no skin reconstruction was needed (figure 2).

The wound healed well and there were no postoperative complications. The patient was discharged after two days in good condition and was advised for follow-up visits. The pathohistological report confirmed a diagnosis of invasive breast carcinoma of no special type, with a 9cm lesion in the biggest axle. The axillary lymph nodes dissected did not show any signs of cancer. The disease was staged as IIIB, or, pT4b, pN0, pMx.

The patient was then referred to an oncologist for further treatment. Unfortunately, as of right now, we cannot report results of a longer follow-up, because this paper is published one month after surgical treatment.



**Figure 1:** Locally-advanced breast cancer (left breast)      **Figure 2:** Surgical wound after modified radical mastectomy

#### Discussion and conclusion

Overall survival in male breast cancer is similar to that of female breast cancer. However, the impression that male breast cancer has worse prognosis, most probably comes from the fact that it tends to be diagnosed at a later stage [1,6].

Another fact is that the lesser amount of breast tissue in men, results in the involvement of the chest wall at an earlier stage, as well. For that reason, it has been stated that the TNM classification may not be appropriate for male patients with breast cancer [4].

Also, it tends to be diagnosed more frequently in the left breast than in the right, and only 1% of the cases are bilateral. This was the case in our paper, where the patient presented with a locally-advanced disease with skin ulceration on his left breast. The reason for delay in seeking medical care was due to fear and anxiety, as our patient openly admitted. This is a form of ‘tumor neglect’, where patients avoid or delay seeking medical care for obvious visible tumors. It is obvious that because of its rarity, there is not enough awareness spread in terms of MBS.

The etiology of MBC is unclear; however, several risk factors have been identified, such as: breast cancer in first degree relatives, previous benign breast lesions and thoracic wall irradiation [7]. In our case, the patient had no previous history of breast disease, as well as other oncological pathology.

In terms of diagnosis, Doyle et al. [8] describe the pathologic and radiologic differences between male and female breast cancer: invasive lobular cancer and in-situ disease is less common in men than in women; MBC more often presents as a locally-advanced disease; MBC is often localized in the subareolar area, in contrast to female breast cancer, which is most commonly localized in the outer upper quadrant; malignant calcifications are more common in women and cystic lesions in men should be evaluated in detail because neoplastic papillary lesion can appear that way.

For the treatment, the standard is considered to be surgery, followed by adjuvant chemotherapy, endocrine treatment or radiotherapy, all depending on the immunohistologic characteristics of the disease. When it comes to surgery, over time, radical mastectomy was replaced with modified mastectomy (considering the size of lesion), which currently is the gold standard, followed by radical mastectomy, total mastectomy and lumpectomy [9,10].

Another treatment approach, which is becoming popular nowadays is breast conservation surgery [11]. However, conservative surgical approach requires adjuvant therapy, and in the literature it has been

shown that men are usually unwilling to receive it [11]. Therefore, it is considered to be not as safe as mastectomy, because patients can receive suboptimal treatment and have a recurrence.

Male breast cancer should be treated as a unique disease, and although rare, more awareness should be spread. Multi-center prospective studies for MBC are needed, which will include the physical and psychological factors in men, and will focus on the treatment, prognosis and tumor biology, because breast cancer behaves different in men.

#### *Consent*

A written informed consent was obtained from the patient for publication of this case report and the accompanying images.

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