

RESEARCH ARTICLE

MALE BREAST ULCERATION REVEALING BREAST CARCINOMA: CASE REPORT

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Abstract

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Breast cancer in men is rare, poorly known by the general population, the breast lesion is often neglected, the patient consults only at an advanced stage of evolution with significant local extension and even secondary localization of metastases. we report the case of a 65 year old patient, who consulted late after 3 years of evolution for an ulceration of the right breast revealing a breast carcinoma with lymph node, pulmonary and bone metastases. this case shows the interest to sensitize the general population on the existence of breast cancer in men as well as women, and the importance of self-examination and early consultation for any abnormal lesion of the breast.

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Introduction:-

Male breast cancer (MBC) is a rare disease that represents less than 1% of all breast cancers and 0.5% of all male malignancies [1].

The incidence of MBC has been considered stable for a long time, but it has been observed that in the last 25 years there has been an increase of 26% [2]. This low incidence is the result of a lack of awareness of this pathology by the general public and sometimes even by the medical profession, associated with a risk of delayed diagnosis and cases with reserved prognosis.

We report a case of a 65 year old man, hospitalized in the dermatology department for a chronic nipple ulceration related to a breast carcinoma with lymph node, lung and bone metastases.

Case Report

We report the case of a 65 years old man affected by diabetic type 2; chronic smoker, weaned 3 months before his hospitalization, who presented with a right nipple ulceration that evolves for 3 years, associated with dyspnea stage 2, abdominal and bone pain.

The physical examination revealed an ulcerated lesion of the right nipple with an erythematous and bleeding background with some fibrinous deposits, measuring about 5 cm. A unilateral adenopathy of 3cm, hard, painless, and fixed was palpated in the right axilla. The examination of the lung reveals a right effusion fluid, on the digital rectal examination a hard prostate nodule was present and the osteoarticular examination shows a sharp pain on

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palpation of the iliac wings and the spinous processes of the lumbar spine. The histology of the right breast biopsy revealed poorly differentiated, infiltrating carcinomatous proliferation arranged in clusters, cords, and trabeculae with the presence of lymphatic emboli. The complement by immunohistochemistry objectified the positivity of the anti-GATA3 antibody and the anti-cytokeratin antibody, that is compatible with a carcinoma of breast origin grade II of SBR.

The mycological study of the skin biopsy finds thick siphoned filamentous structures in favor of mucormycosis on direct examination but the culture remained sterile, the expert gene was negative. Poorly differentiated infiltrating carcinoma was also present on pleural and lymph node biopsy.

We completed the workup with a C-TAP which revealed a parietal mass projecting from the right nipple-areolar plate associated with diffuse circumferential nodular pleural thickening and homolateral pleural effusion of moderate size. It should be noted that there were also nodules of peritoneal carcinosis associated with secondary diffuse bone lesions. The vesico-prostatic ultrasound shows a heterogeneous prostate with microcalcifications.

On sacroiliac MRI, multiple spinal and pelvic bone lesions of secondary appearance without spinal cord compression were found.

Our patient was referred to oncology, a palliative chemotherapy was proposed, he received a single session, he died a few days later.



Figure 1:- chronic breast ulceration.



Figure 2:- Chronic breast ulceration.

Discussion:-

Breast cancer occurs much less frequently in men than in women, but the prognosis is poor because diagnosis is usually made at an advanced stage. The median age of diagnosis in men was 60 years, making her 10 years older than in female patients with this disease [3]. The age of our patient was 65 years; it is close to the average age (67.7 years) found in a series of 25 cases published in 2020 by el fouhi et al [3].

The etiopathogeny of male breast cancer remains obscure; however, many risk factors seem to be incriminated: Obesity by aromatization of androgens and alcoholic cirrhosis by the elevation of sex steroid binding globulin provoking a state of hyperoestrogenism [4] .Testicular abnormalities such as testicular ectopia, orchitis, orchiectomy, congenital inguinal hernias, and infertility are factors associated with a high risk of breast cancer. Trans-umbilical breast augmentation, history of breast trauma, and transsexuality (including surgical and chemical castration) appear to be involved [4]. Hypogonadism, present in Klinefelter's syndrome, makes it a classically accepted risk factor (relative risk of 20 to 50 times compared to a man without genetic abnormalities) [4]. Other occupational risk factors have been identified: exposure to high temperatures, toxic fumes, hydrocarbons or magnetic fields. Breast cancer in men is increased if there is a family history, according to J.R. Weiss [4], a family history of breast cancer in a man or a first-degree woman is associated with a two- to threefold increase in risk. Mutations in the BRCA1 and BRCA2 genes are implicated in a proportion of breast cancer in men, but with a lower absolute risk than in women and with a lower frequency [4]. Our patient had no family history of breast cancer; the risk factor was the exposure to tobacco for several years since early adolescence. It is now known that cigarette smoke, whether it comes from the mainline or the sidestream, contains over 7,000 chemicals, 69 of which are known to cause cancer [5], including more than 20 known to cause mammary tissue.

The most common clinical sign of breast cancer onset in men is a painless palpable swelling sub areolar. Other symptoms may include involvement nipple, with retraction and/or ulceration and/or bleeding [6, 3]. Clinically our patient presented initially 3 years before his hospitalization a nodular lesion of the right nipple which ulcerated thereafter. Axillary lymph node involvement is very common and clinically suspicious adenopathy has been seen in 40-55% patients [3]. The echomanmographic appearance is similar to that of breast carcinoma in women.

histologically, MBC is ductal in the vast majority of cases (70-95%). Lobular carcinoma in men is extremely rare (1% of cases); there are no acini or lobules in the male mammary gland.

Any skin pathology could be located on the skin covering the mammary gland. Dermatological conditions can simulate breast cancer, thus posing a problem of differential diagnosis: pilomatricoma, cutaneous fibroma, neurofibroma, epidermoid cyst, lipoma, subcutaneous hemangioma, benign or malignant adnexal tumor, multiple myeloma, plasmacytoma, leiomyoma, breast metastasis of prostate cancer [7].Cases of lupus or tuberculosis panniculitis and granulomatous mastitis with or without skin changes, may also simulate breast cancer, especially as they may be accompanied by a nipple retraction and axillary adenopathy [7]. In most cases, skin and/or breast biopsy allows an accurate diagnosis in most cases, thus avoiding unnecessary mastectomy [7]. Other skin manifestations may be related to the cutaneous metastases that can occur on the entire integument.

Our patient underwent a skin biopsy with 3 fragments to eliminate differential diagnoses, cutaneous tuberculosis was ruled out in front of an expert gene on skin biopsy which came back negative, the direct mycological examination highlighted an aspect of thick siphoned filamentous structures not stained in favor of mucormycosis but the culture remained sterile evoking a contamination. The cutaneous manifestations seem to be more frequent and earlier in men than in women because of the small volume of the mammary gland in men (rudimentary vestigial tissue). Tumor invasion of the skin seems to be a poor prognostic factor as it facilitates metastasis from the dermal lymphatic vessels [7]. The presence of ulceration or permeation nodules limited to the same breast, the patient is classified as stage T4b and therefore at least stage III according to the TNM classification revised in 2002. The most important prognostic indicators are the stage at diagnosis and the lymph node status [8].

The therapeutic indications depend on the histological type of the tumor lymph node involvement, clinical stage of the disease and the patient's general condition: curative treatment is used for localized tumors. However, in invasive forms with metastatic extension, the treatment is palliative aiming at a better quality of life [9]. Surgery is the first line of treatment, based on a modified radical mastectomy with axillary lymph node dissection according to Patey[9]. Due to the low volume of the mammary gland in men and the rapidity of tumor extension, conservative surgery is rarely indicated. The radical mastectomy according to Haldsted keeps some indications in case of invasion of the pectoralis major muscle [9]. Axillary lymph node dissection is quite frequently complicated by upper limb lymphoedema [9], which is disabling in 10 to 25% of cases. The sentinel lymph node technique has recently been introduced to avoid lymph node dissection on healthy lymph nodes. Given the frequent involvement of the skin and/or the nipple, as well as the frequency of axillary lymph node invasion, local radiotherapy is very often indicated at the wall and scar level. the reported case benefited from a palliative chemotherapy, he died a few days after his first session.

Breast cancer in men seems to have a worse prognosis than in women. Tumor size and lymph node involvement are two important prognostic factors in male breast cancer [10]. Men with a tumor size of 2-5 cm have a 40% increased risk of death compared to those with tumors less than 2 cm in maximum diameter. In case of lymph node involvement, there is a 50% greater risk of death than in the case of nodes without metastases. In univariate analysis, hormone receptor negativity and tumor grade are associated with a poor prognosis of survival [10, 4]. Male breast cancer due to a mutation in BRCA2 mutation occurs earlier and with a worse prognosis. Survival rates for men are lower, but this is due to the fact that the diagnosis is made at a more advanced stage of the disease. Our patient consulted late after 3 years of evolution of the breast lesion, after the installation of dyspnea stage 2, abdominal and bone pain. More than 40% of patients consult for T3 or T4 stages according to Ribeiro in a series of 420 cases [11].

Conclusion:-

Breast cancer exists in men. The particularity of MBC is its discovery at a late stage. The diagnosis and screening are therefore the most important points to develop in order to improve the prognosis. It is therefore very important that the examination of the breasts and axillary areas should be part of the general clinical examination of men, particularly in patients with metabolic disorders and endocrinological conditions such as diabetes, obesity and hypercholesterolemia.

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