

CASE REPORT

MALE INVASIVE SOLID PAPILLARY CARCINOMA: A CASE REPORT

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ABSTRACT

The most common type of invasive carcinoma in the male breast is carcinoma without a special type (NST), followed by papillary carcinomas, of which the lobular and metaplastic types are the rarest. Solid papillary carcinomas are tumors characterized by a solid patterned growth with delicate fibrovascular nuclei. They may present clinically as a palpable mass, a mammographic abnormality, and a bloody nipple discharge. The present report showed a 67-year-old male patient who presented with a hardened nodule in the left breast with 2 months of evolution. The patient underwent left mastectomy with sentinel lymph node investigation. The anatomopathological and immunohistochemical study led to the diagnosis of invasive solid papillary carcinoma.

KEYWORDS: MALE BREAST CANCER; INVASIVE SOLID PAPILLARY CARCINOMA; MASTECTOMY

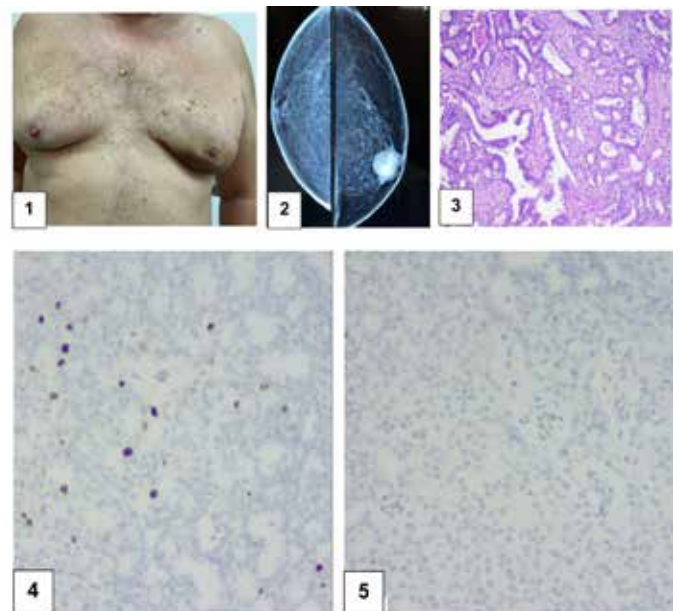
INTRODUCTION

It is known that male breast cancer usually presents with a slightly eccentric retro-areolar unilateral painless mass, and that almost half of patients have tumors smaller than 20 mm. The most common type of invasive carcinoma in the male breast is No special type carcinoma (NST), followed by papillary carcinomas, of which the lobular and metaplastic types are the rarest. Solid papillary carcinomas are tumors characterized by a solid patterned growth with delicate fibrovascular nuclei. They often show neuroendocrine differentiation and are biologically indolent. They may present clinically as a palpable mass, a mammographic abnormality, and a bloody nipple discharge. The tumor may be rounded, with a circumscribed mass on mammography and solid and well-defined, hypoechoic or heterogeneous on ultrasound. Coexisting stromal distortion suggests an invasive component¹.

CASE REPORT

J.L.L.O., 67 years old, male, presented a hardened nodule in his left breast with 2 months of evolution. On physical examination, the nodule was irregular, indurated, measuring 2 cm in its longest axis, located in the retroareolar region. Mammography and ultrasound showed BI-RADS 5, the nodule being solid-cystic. Chest radiography, bone scintigraphy and upper abdominal ultra-

sound were performed and there were no alterations. The patient underwent left mastectomy with sentinel lymph node investigation. The anatomopathological and immunohistochemical study led to the diagnosis of invasive solid papillary carcinoma.



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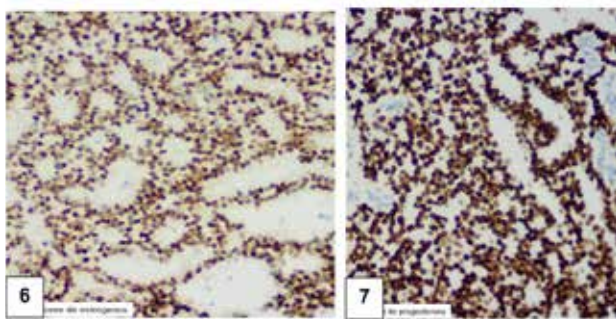


Figure 7 - A. Ultrasonography (irregular nodule in the retroareolar region of the left breast, solid-cystic). B. Macroscopy of the surgical specimen. Solid-cystic nodular lesion in a 67-year-old man.

DISCUSSION

The lifetime risk of developing breast cancer in males is 1:1000 and the median age at diagnosis is 67 years. The incidence rate is directly related to the advancing age of individuals.

Regarding the histological classification, invasive ductal carcinoma is the most recurrent type, representing approximately 90% of cases. Invasive lobular carcinoma, on the other hand, makes up less than 2% of all cases, given the absence of acini and lobules in healthy male breast tissue. Solid papillary carcinoma is a rare form of breast cancer manifestation in men¹.

Regarding the immunohistochemical classification, the neoplasms show a greater propensity for positivity in relation to estrogen and progesterone receptors and a low expression of human epidermal growth factor (HER-2).

The clinical presentation of male breast cancer is similar to that of women. The main signs and symptoms that may be present are: presence of a retroareolar nodule, usually painless, or thickening of the breast tissue, retraction or inversion of the nipple, changes in the skin, such as erythema and ulcerations and papillary effusion².

The findings evidenced in these patients are usually eccentric retroareolar masses with spiculated, indistinct or microlobulated margins. Microcalcifications are infrequent, in contrast to females, in which they are usually present. Skin retraction or ulceration and lymph node involvement may be found. Breast ultrasound may also be useful for these patients, revealing malignant lesions such as solid lesions or complex cystic lesions (Figure 7).

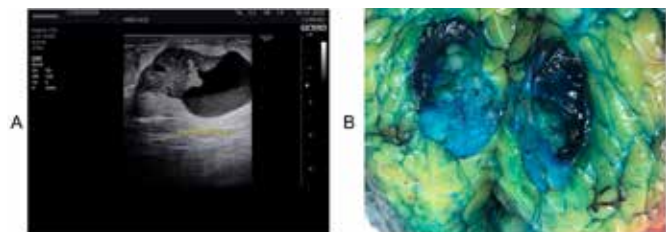


Figura 7 - A. Ultrassonografia (nódulo irregular em região retroareolar de mama esquerda, sólido-cístico). B. Macroscopia da peça cirúrgica. Lesão nodular sólido-cística em homem de 67 anos.

For patients diagnosed with tumors at earlier stages, localized and with clinically negative axilla, a modified radical mastectomy associated with a sentinel lymph node biopsy is usually adopted. Studies report the effectiveness of breast-conserving surgery associated with radiotherapy. However it is still little adopted due to the scarcity of surrounding breast tissue and the centralized location of tumor masses³.

Hormone therapy with tamoxifen is commonly adopted in men who have hormone receptor-positive tumors (ER+ and PR+). The American Society of Clinical Oncology (ASCO) recommends that patients who meet these criteria should receive at least 5 years of Tamoxifen therapy¹⁻³.

CONCLUSION

Male breast cancer is 100 times rarer than female breast cancer, and invasive solid papillary carcinoma is even rarer. In the present report, the diagnosis of invasive solid papillary carcinoma was made in a male patient, which is quite uncommon. It is necessary to consider the morphological characteristics and the immunohistochemical profile, as well as the clinical history and imaging tests of the tumor, in order to define the correct diagnosis. The patient had no metastasis and was treated with mastectomy and sentinel lymph node in the left armpit. The proposed adjuvant treatment was tamoxifen 20 mg. Chemotherapy and radiotherapy were not required.

REFERENCES

1. FOX, Stephen; SPEIRS, Valerie; SHAABAN, Abeer M. Male breast cancer: an update. *Virchows Archiv*, [S. l.], v. 480, n. 1, p. 85-93, 2022. DOI: 10.1007/s00428-021-03190-7. Disponível em: <https://link.springer.com/10.1007/s00428-021-03190-7>.
2. GUCALP, Ayca; TRAINA, Tiffany A; EISNER, Joel R; PARKER, Joel S; SELITSKY, Sara R; PARK, Ben H; ELIAS, Anthony D; BASKIN-BEY, Edwina S; CARDOSO, Fatima. Male breast cancer: a disease distinct from female breast cancer. *Breast Cancer Research and Treatment*, [S. l.], v. 173, n. 1, p. 37-48, 2019. DOI: 10.1007/s10549-018-4921-9. Disponível em: <http://link.springer.com/10.1007/s10549-018-4921-9>.
3. Lakhani SR, Ellis IO, Schnitt SJ, Tan PH and van de Vijver MJ (2012). WHO classification of tumours of the breast. IARC. Lyon;