

CASE REPORT: INTRADUCTAL PAPILLOMA OF THE MALE BREAST

Relato de caso: papiloma intraductal em mama masculina

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ABSTRACT

Breast benign tumors, intraductal papilloma and fibroadenomas are common conditions in women; however, they are very rare in males. In this study, we report the case of a male patient, 75 years old, presenting with complaint of bilateral gynecomastia and palpable retroareolar mass in the left breast. The patient was submitted to imaging tests and core biopsy, and the hypothesis of intraductal papilloma was confirmed upon anatomopathological study. The mastology team opted for excision of the lesion and correction of gynecomastia.

KEYWORDS: intraductal papilloma; breast; gynecomastia; breast diseases.

RESUMO

Tumores benignos da mama, papiloma intraductal e fibroadenomas são condições comuns em mulheres, mas muito raras em homens. Neste estudo, relatamos o caso de um paciente do sexo masculino, com 75 anos de idade, cuja queixa era de ginecomastia bilateral e massa retroareolar palpável na mama esquerda. O paciente foi submetido a exames de imagem e *core-biopsy*, e a hipótese de papiloma intraductal foi confirmada após estudo anatomopatológico. A equipe de mastologia optou pela excisão da lesão e correção da ginecomastia.

PALAVRAS-CHAVE: papiloma intraductal; mama; ginecomastia; doenças mamárias.

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INTRODUCTION

At birth, a male's breast is very similar to a female's breast. However, due to the increase in testosterone levels in the pre-pubertal period in males, there is involution and atrophy of the lactating ducts. There is also no increase in estrogen and progesterone levels¹. Gynecomastia is the most common disease of the male breast, but just like in the female breast, diseases related to stromal and ductal proliferation can occur, including carcinoma, fibroadenoma, lipoma, fat necrosis, and papilloma. Although extremely rare, the intraductal papilloma is characterized as a benign affection of the male breast².

CASE REPORT

A 75-year-old patient was assisted at the Service of Radiology with history of bilateral gynecomastia and palpable nodule in the left breast since July 2017. He denied the use of medication and steroids. There was a palpable rounded nodule in the left subareolar region which was not painful to palpation and presented no skin thickening or papillary discharge. Mammography (Figure 1) showed bilateral fibroganular tissue (Grade IV Gynecomastia) and a rounded, dense nodule with circumscribed margins, measuring 3.7 cm in its largest diameter in the left breast's retroareolar region (BIRADS 4). Ultrasonography (Figure 2) showed a circumscribed round hypoechoic nodule in the left breast's retroareolar region, measuring $2.9 \times 2.0 \times 2.0$ cm and 1,0 cm distant from the skin. Histological examination by biopsy with a thick needle (Figure 3) showed ductal proliferation compatible with intraductal papilloma. Excision of the lesion was indicated by the mastology team, followed by esthetic correction of gynecomastia at the patient's request.

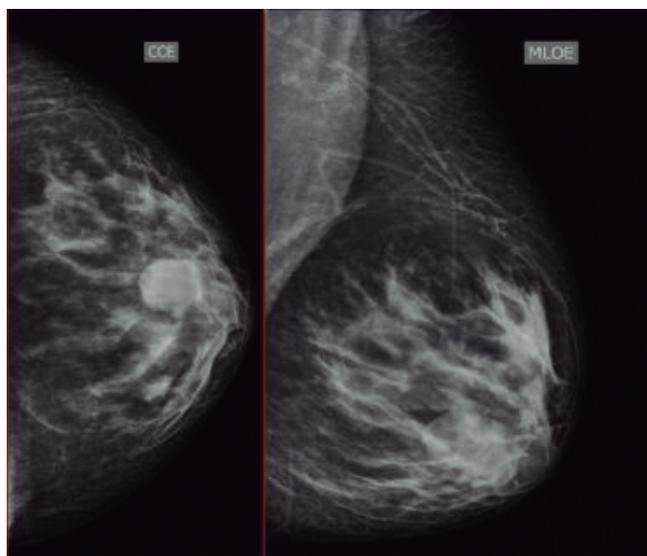


Figure 1. (A) Craniocaudal and (B) oblique mediolateral mammography of the left breast showing nodular retroareolar lesion.

DISCUSSION

Intraductal papilloma is a rare benign neoplasm that can affect men at any age and manifests clinically as a palpable mass, usually unilateral, painful or not, with or without papillary discharge³. Histologically, it is characterized by epithelial proliferation with uniform distribution of myoepithelial cells nurtured by fibrovascular nuclei⁴.

Radiological diagnosis is based on mammography, ultrasonography and, when necessary, complementary magnetic resonance imaging (MRI). Ultrasonography is more sensitive than mammography to detect intraductal papilloma, and the main findings are: intraluminal mass with dilated duct and inner hypervascularization shown in Doppler study⁵. However, a study by Lam et al.⁶ reported that imaging findings are neither sensitive nor specific enough to distinguish benign from malignant papillomatous lesions; therefore, surgical excision

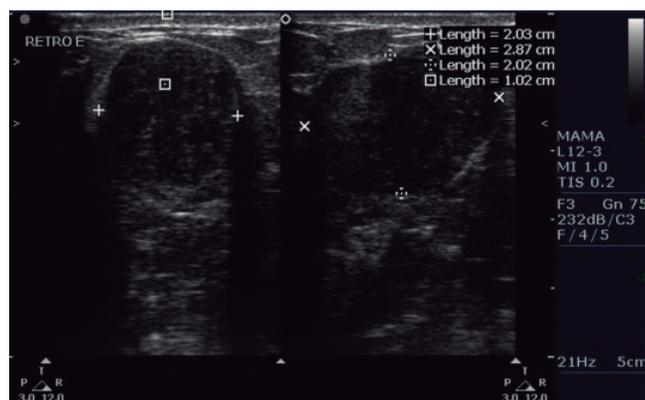


Figure 2. Ultrasonography of the left breast showing a solid hypoechoic nodule measuring $2.9 \times 2.0 \times 2.0$ cm, and 1.0 cm distant from the skin.

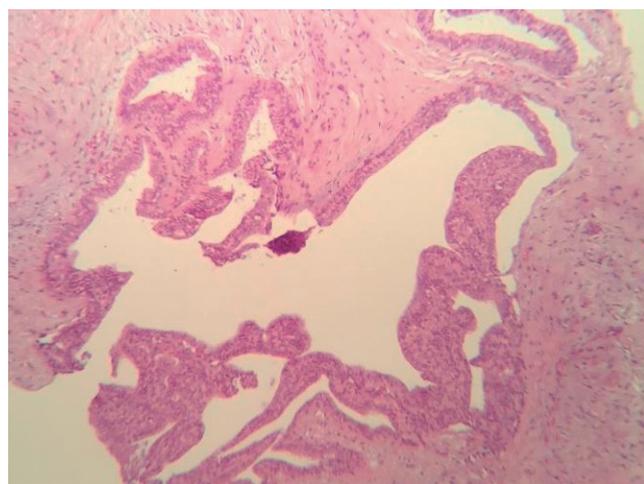


Figure 3. Microscopy of material from the left breast: fragment from breast with intraductal.

and histopathological analysis are required. Two other studies have shown different conclusions: Sydnor et al.⁷ supports only mammographic follow-up for core-biopsy-diagnosed lesions, since the potential for malignancy is low (3%); Swapp et al.⁸ also reported being against surgical excision of benign papilloma diagnosed by core-biopsy, as they consider follow-up enough and emphasize the need for surgical excision only for atypical papillomatous lesions found in core-biopsy due to high potential for malignancy (67%).

CONCLUSION

Follow-up instead of surgical excision has become the best option for papillary lesions without atypia diagnosed by percutaneous biopsies, especially when not presenting with microcalcifications, as a palpable mass, or not showing characteristics that would lead to suspicion in imaging exams. Intraductal papilloma is an extremely rare condition characterized as a benign affection of the male breast. Surgical excision was indicated by the mastology team, followed by esthetic correction of gynecomastia at the patient's request.

REFERENCES

1. De Vries, Walter AW, Vrouwenraets BC. Intraductal Papilloma of the Male Breast. *J Surg Case Rep*. 2016;2016(2):rjw014. <https://dx.doi.org/10.1093%2Fjscr%2F2Frjw014>
2. Rakha EA, Ho BC, Naik V, Sen S, Hamilton LJ, Hodi Z, et al. Outcome of breast lesions diagnosed as lesion of uncertain malignant potential (B3) e suspicious of malignancy (B4) on needle core biopsy, including detailed review of epithelial atypia. *Histopathology*. 2011;58(4):626-32. <https://doi.org/10.1111/j.1365-2559.2011.03786.x>
3. Cerri GG, Leite CC, Rocha MS. *Tratado de Radiologia. Barueri: Manole; ano. v. 3.*
4. Shim JH, Son JU, Kim EK, Kwak JY, Jeong J, Hong SW. Benign Intracystic Papilloma of the Male Breast. *J Ultrasound Med*. 2008;27(9):1397-400.
5. Nguyen C, Kettler MD, Swirsky ME, Miller VI, Scott C, Krause R, et al. Male Breast Disease: Pictorial Review with Radiologic-Pathologic Correlation. *Radiographics*. 2013;33(3):763-79. <https://doi.org/10.1148/rg.333125137>
6. Lam WW, Chu WC, Tang AP, Tse G, Ma TK. Role of radiologic features in the management of papillary lesions of the breast. *Am J Roentgenol* 2006;186(5):1322-7. <https://doi.org/10.2214/AJR.04.1908>
7. Sydnor MK, Wilson JD, Hijaz TA, Massey HD, Shaw de Paredes ES. Underestimation of the presence of breast carcinoma in papillary lesions initially diagnosed at core-needle biopsy. *Radiology*. 2007;242(1):58-62. <https://doi.org/10.1148/radiol.2421031988>
8. Swapp RE, Glazebrook KN, Jones KN, Brandts HM, Reynolds C, Visscher DW, et al. Management of benign intraductal solitary papilloma diagnosed on core needle biopsy. *Ann Surg Oncol*. 2013;20(6):1900-5. <https://doi.org/10.1245/s10434-012-2846-9>