

Giant sclerosing papilloma mimicking locally advanced breast carcinoma

PAPILOMA ESCLEROSANTE GIGANTE MIMETIZANDO CARCINOMA DE MAMA LOCALMENTE AVANÇADO

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Conflict of interest: none

The patient was a 54-year-old Brazilian woman presenting a progressive mass in the right breast. The clinical exam showed a 9 x 8 cm tumor and a hardened axillary lymph node. It was clinically considered a T3N1M0 breast tumor (Figure 1A). Mammography showed multiple oval formations, occupying the whole breast (Figure 2A). Ultrasonography showed the presence of multiple cysts, many of which containing vegetating lesions with intense vascular flow (Figure 2B) and absence of axillary lesion. Magnetic resonance imaging showed multiple oval cysts associated with vegetative lesions, a 4.7cm infiltrative area near the pectoral muscle (Figure 2C), and normal enlarged lymph node. As findings highly suspicious of malignancy were noted, radiological staging was performed. Abdominal ultrasound, bones scan and thoracic radiography showed absence of metastatic disease.

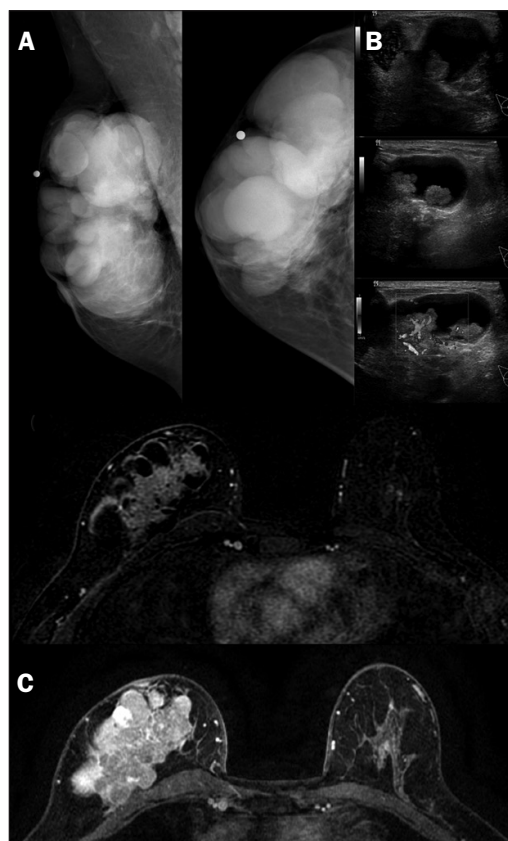


FIGURE 2 Radiologic findings. (A) Mammography: multiple round image in the whole right breast; (B) breast ultrasound: cystic mass with intense vascular flow; (C) MRI findings: infiltrative solid mass with intense early enhancement and washout kinetic curve associated with multiple cysts occupying the right breast.

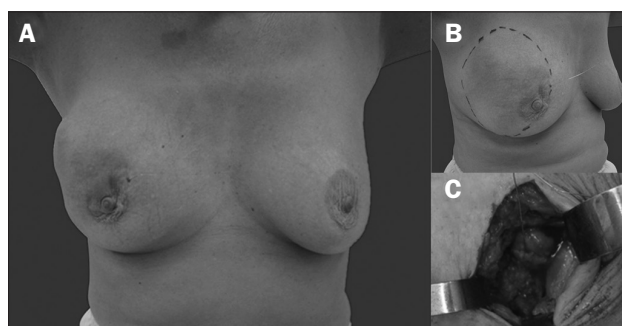


FIGURE 1 Clinical exam. (A) lump in right breast; (B) marked area showing clinical localization; (C) open biopsy.

The core biopsy showed a benign complex papillary lesion. Since the radiologic and pathologic divergence did not allow a definitive diagnosis of malignancy, an ultrasound-guided stereotactic needle biopsy was scheduled. The open biopsy was performed in a vegetative intracystic lesion (Figures 1B and 1C) and pathologic findings showed a papillary neoplasia with atypical cells. Due to atypical findings and the necessity to evaluate the whole lesion,¹⁻⁴ the patient underwent a simple mastectomy with sentinel lymph node dissection. No reconstructive surgery was considered because of the lesion size and tumor characteristics. The macroscopic assessment showed a 7.5 x 6.0 cm solid-cyst lesion, with a 3.8 cm solid component (Figure 3A). The microscopy revealed a sclerosing papilloma harboring ductal carcinoma *in situ* in about 30% of the lesion (Figures 3B and 3C), with free margins and absence of lymph node metastasis. Immunohistochemistry for myoepithelial cells was performed in order to exclude *foci* of invasion in the periphery of the lesion (Figure 3D).

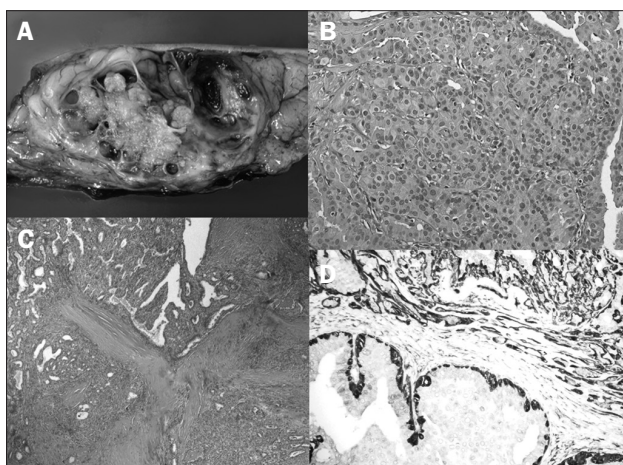


FIGURE 3 Pathologic findings. Macroscopic finding: (A) Gross examination showed a large solid-cystic tumor. Microscopic findings: (B) papillary neoplasia with sclerotic stroma (HE, 40x); (C) areas containing carcinoma *in situ* (HE, 200x); (D) Immunohistochemistry positive for myoepithelial cells (Calponin, 200x).

Mammary extensive papillomatous lesions represent a clinical challenge, especially when observing a highly suspicious malignant tumor based on clinical and radiological findings.⁵ As core biopsy showed a benign lesion, an open biopsy in the vegetative intracystic lesion was performed to improve material sampling. So, when a definitive diagnosis of malignancy cannot be done because of discordant findings, sampling limitations of a core biopsy⁵ or open biopsy, or limited sensibility of breast images,^{5,6} resection of the entire lesion is mandatory^{1-4,6} due to high association with malignancy.^{1,2,4} The open biopsy was an attempt to improve the pathological results that were hindered by limitation of diagnostic procedures and discordant findings. Also, the indication for diagnostic mastectomy,⁷ as seen in this case, is a fact that must be thoroughly discussed with the patient.

REFERENCES

1. Sydor MK, Wilson JD, Hijaz TA, Massey HD, Paredes ESS. Underestimation of the presence of breast carcinoma in papillary lesions initially diagnosed at core-needle biopsy. *Radiology* 242(1):58-62.
2. Liberman L, Tornos C, Huzjan R, Bartella L, Morris EA, Dershaw DD. AJRIs surgical excision warranted after benign, concordant diagnosis of papilloma at percutaneous breast biopsy? *ARJ*. 2006; 186(5):1328-1334.
3. Ueng SH, Mezzeti T, Tavassoli FA. Papillary neoplasms of the breast. *Arch Pathol Lab Med*. 2009; 133(6):893-907.
4. Youk JH, Kin EK, Kwak JY, Son EJ. Atypical papilloma diagnosed by sonographically guided 14-gauge core needle biopsy of breast mass. *AJR*. 2010;194(5):1397-492.
5. Lam WWM, Chu MCW, Tang APY, Tse G, Ma TKF. Role of radiologic features in the management of papillary lesions of the breast. *AJR* 2006;186(5):1322-1327.
6. Eliada R, Chong H, Lylmarni S, Goldberg F, Muradai S. Papillary lesions of the breast: MRI, ultrasound, and mammographic appearances. *AMJ J Roentgenol*. 2012; 183(2): 264-71.
7. Fenoglio C, Raffaele L. Sclerosing papillary proliferations in the female breast. A benign lesion often mistaken for carcinoma. *Cancer* 1974; 33(3): 691-700.