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Giant malignant phylloides tumor: case report

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SUMMARY: Giant malignant phylloides tumor: case report.

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The incidence of phylloides breast tumors is less than 1% in the population affected by breast cancers. The age at higher risk is between 35 and 45 years. These neoplasms are characterized by a proliferation of mesenchimal and epithelial cells.

We present a rare case of giant malignant phylloides tumor (28x21x15 cm) with a complet substitution of the gland. The clinical presentation of phylloides tumors is heterogenous; the surgical treatment is a conservative one of the gland if the neoplastic lesion size is less than 5 cm with a free margin of 1 cm and a mastectomy if the diameter of lesion is more than 5 cm. Complementary therapies still remain controversial.

RIASSUNTO: Tumore filloide gigante maligno: caso clinico.

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L'incidenza di tumore mammario filloide nella popolazione affetta da carcinoma mammario è inferiore all'1%. L'età a maggiore rischio è quella compresa tra 35 e 45 anni. Queste neoplasie sono caratterizzate dalla proliferazione di cellule mesenchimali ed epiteliali

Presentiamo un raro caso di tumore filloide gigante (28x21x15 cm) con completa sostituzione della ghiandola. La presentazione clinica del tumore filloide è eterogenea e il trattamento chirurgico è conservativo se la lesione è inferiore a 5 cm di diametro con margini liberi di almeno 1 cm, mentre si opta per la mastectomia quando il diametro della lesione è maggiore di 5 cm. Le terapie complementari sono argomento ancora in discussione.

KEY WORDS: Breast cancer - Phylloides tumor - Mastectomy.
Carcinoma mammario - Tumore filloide - Mastectomia.

Introduction

Phylloides breast tumors are characterized by proliferation of both epithelial and mesenchymal cells. Their incidence in the population affected by breast cancer is < 1%. The age range at higher risk is between 35 and 45 years (1, 2), mostly among Latin American women.

Because of their very low incidence and for the variety of surgical options, we report a case of giant phylloides tumor in a 47 year-old patient.

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Case report

A 47 year-old woman come to our attention for the presence of a huge mass involving her right breast. The patient referred the presence of a lump of 3-4 cm since some months. Because a former malignant neoplasm in her family, she, feargue, refused to have any exam until March 2006 when she came to our attention for a rapid increase of the neoplasm with skin ulceration.

A clinical examination showed the presence of a 15 cm, hard, moderately painful at light touch, mobile, ulcerated mass in the right breast. No sovraclavear or cervical lesions were detectable on physical examination (Fig. 1).

Laboratory test documented only a mild anemia (Hb 10,9 g/dL). Fine needle aspiration biopsy showed stromal fibrosis with epithelial hyperplasia and some calcifications.

For the rapid local progression of the mass on April 2006 we performed right mastectomy. A solid mass of 25 cm with an arboriform ulceration of the skin was removed (Fig. 2).

The postoperative course was uneventful and the patient was discharged after 36 hours from surgery.

Histology documented the complete substitution of the gland, which sized 28x21x15 cm, by an heterogeneous neoplastic tissue, constituted by central hemorrhagic areas and cystic degeneration, high stromal component, pleiomorphism and high mitotic index (17 mitosis x 10 HPF). A skin ulceration of 6x7 cm was present.

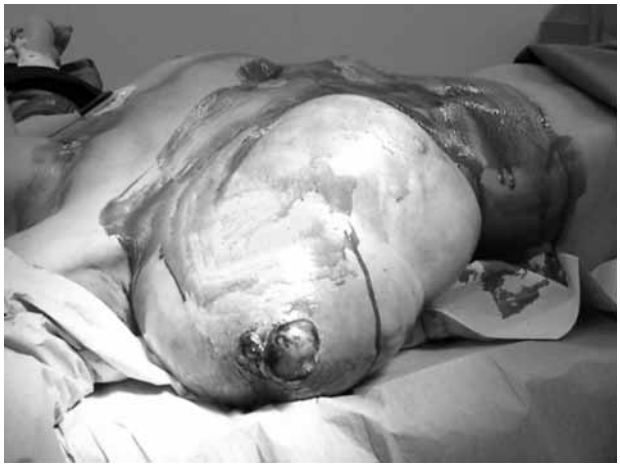

Fig. 1 - Breast lesion before surgical procedure.

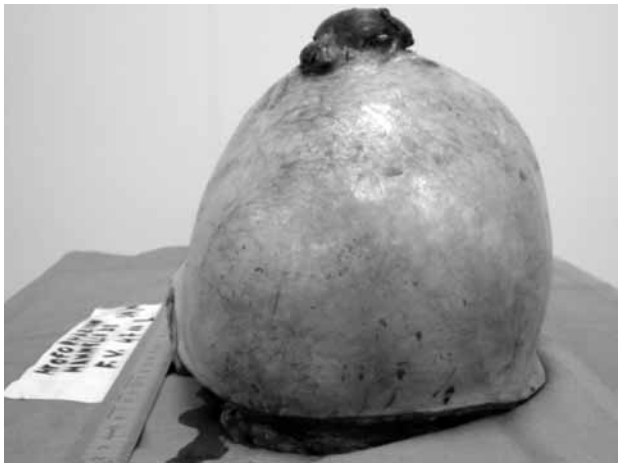

Fig. 2 - Surgical mass.

These findings were suggestive of phylloides malignant tumor. Resection margins were free from disease.

Discussion

Phylloides tumors are mesenchimal neoplasms of the breast. They were described for the first time by Müller in 1838 (3).

Their clinical presentation is heterogenous for shape and sizes. Surgical treatment depends on tumor size. The conservative treatment depend on resection margins also: if they are free from disease for at least 1 cm, local recurrence rate, which is usually 13-15%, decreases significantly.

In the 20% of cases phylloides tumors present with clinically limphoadenopaties but only 5% of nodes is actually involved by the disease (3, 4).

Some authors studied the correlation between Ki67 and hystologic grade while others focused on p53, c-kit and growth factor receptors. All of these factors were related to tumor growth but up to date no markers has been predictive of disease. Genetical studies highlighted how chromosomes 1, 3, 12 and 18 present rearrangements and modifications, expecially compared to fibroadenomas (5).

For phylloides tumors larger than 5 cm a mastectomy is advisable while for smaller tumors is advisable a resection with free margin of 1 cm or more. If the resection does not allow a free margin of at least 1 cm, some authors advice radiotherapy wich improves survival and reduces local recurrence. A common agreement on chemotherapic protocols for this kind of neoplasms has not been achieved yet (4).

A study on 48 women with malignant phylloides tumors showed the presence of distant metastasis in 37% of patients, local recurrence before the evidence of distant metastasis in one third and a mean disease free survival of 60.5 months (4). Distant metastasis, which are mainly due to hematic diffusion, occur most frequently to lungs, pleurae and bones. The 5 year survival rate is 90% (1).

Conclusions

The surgical treatment of breast phylloides tumors is mastectomy for lesions > 5 cm, and conservative therapy, with free margins more than 1 cm, for ≤ 5 cm ones. Complementary therapies, such as chemotherapy, still remain controversial.

References

1. Kapiris I, Nasiri N, A'Hern R, Healy V, Gui GPH. Outcome and predictive factors of local recurrence and distant metastases following primary surgical treatment of high-grade malignant phylloides tumours of the breast. EJSO 2001;27:723-730.
2. Martino A, Zamparelli M, Santinelli A, Cobellis G, Rossi L, Amici G. Unusual clinical presentation of a rare case of phylloides tumor of the breast in an adolescent girl. J Pediat Surg 2001;6:941-943.
3. Mangi A, Smith B, Gadd M, Tanabe K, Ott M, Souba W. Surgical management of phylloides tumors. Arch Surg 1999;134: 487-473.
4. Guerrero MA, Ballard BR, Grau AM. Malignant phylloides tumor of the breast: review of the literature and case report of stromal overgrowth. Surg Oncol 2003;12:27-37.
5. Barbarosa ML, Ribeiro EMSF, Silva GF, Maciel ME, Lima RS, Luciane RC, Cavalli IJ. Cytogenetic findings in phyllodes tumor and fibroadenomas of the breast. Cancer Genet Cytogenet 2004;154:156-159.