PHYLLODE BREAST SARCOMAS, CLINICOPATHOLOGICAL SERIES

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Objectives :

Phyllode breast sarcomas are a rare fibroepithelial tumors that account for less than 0.5% of all breast tumors.

Due to their extreme rarity and heterogeneity, our knowledge of mammary sarcoma is limited to a few studies involving a small number of patients.

The aim of this study is to identify the epidemiological, clinical, radiological and anatomopathological characteristics of phyllode sarcomas, to study therapeutic modalities and to determine the prognostic factors.

Methods:

We carried out a retrospective study of 18 cases of Phyllode breast sarcomas collected at Salah Azaiz Institute between 2004 and 2013.

Results:

The mean age was 48.8 years. The average delay of consulting was 12.3 months. No patient had a history of adenofibroma. A breast lump palpation was the chief complaint (97% of cases). The mean tumor size was 12.3 cm.

The tumor was located in the left breast in 2/3 of cases (12 cases).

The presence of palpable homolateral lymph node was objectified in 1/3 of the patients (6 patients).

Mammography was performed in 15 patients: it showed the presence of benign opacity classified as ACR 3 in 80% of cases (12 patients), while it showed the presence of a suspicious mass classified as ACR 5 in only 20% of cases (3 cases) (Figure 1).

Breast ultrasound was performed in 15 patients, it was in favour of malignancy of the breast lesion in 55. 5% of cases (10 patients), while it was in favour of benignity in 44. 5% of cases (8 patients).

The core needle biopsy was performed only in 38.8% of patients (7 patients).

Seventeen patients (94.4%) underwent mastectomy and one patient underwent wide lumpectomy.

Lymph node dissection was performed in 27.7% patients (5 cases).

Margins were free of disease in 77. 7% of cases (14 cases), cramped in 16. 6% of cases (3 cases), and invaded in 0. 05% (1 case).

Only one patient had an invaded axillary lymph node in the definitive histological exam.

The histologic grade according to FNCLCC was grade I in 16.6% of cases (3 cases), grade II in 55.5% of cases (10 cases), and grade III in 27.7% of cases (5 cases).

Adjuvant radiotherapy was done in 13 cases (72.2%), while chemotherapy was administrated to 5 patients (27.7%). After a follow-up ranging from 4 to 124 months, 5 patients (27.7%) developed local recurrences and 6 patients (33.3%) developed distant metastases. The median overall survival was 10 months and the median disease-free survival was 7 months. An analytical study of the parameters age, tumor size, mammographic appearance, presence or absence of metastases and local recurrences showed no correlation with the histological subtype ($p > 0.05$). In univariate analysis, the identified overall survival prognostic factors were surgical margins < 1 cm ($p = 0.005$) and tumor necrosis ($p = 0.028$).

Figure 1: Phylloide sarcoma: scattered nodular opacities drowned in the left breast stroma

Discussion:

Phylloid tumors are rare fibroepithelial neoplasias representing 0. 3 to 0. 9% of breast tumors in women. The association of adenofibroma and phylloid tumor has been reported by several authors because of the morphological relationship between these two lesions. The presence of an adenofibroma was reported in 16% of cases in the Grimes et al series. However, in our series, none of the 18 patients had a personal history of adenofibroma.

Surgery is the cornerstone of the treatment of phylloid sarcoma. Mastectomy without lymph node dissection is considered the gold standard. Radiotherapy contributes to better local control of phyllode sarcomas but does not necessarily improve overall survival.

The role of chemotherapy in the treatment of phyllode sarcomas is not currently well established. It is the therapy of choice for improving quality of life in metastatic breast sarcoma.

Phylloid sarcomas are recognized by a high locoregional relapse rate estimated at 20%. The latter are strictly correlated to the quality of tumour margins and histological grade.

The main prognostic factors for phylloid sarcoma are histopronostic grade according to FNCLCC, quality of tumor margins and tumor size.

Conclusion:

Phyllode breast sarcomas are rare tumors. The therapeutic approach is not well codified. Multicenter studies are needed to establish an optimal therapeutic strategy.