

Phyllodes Carcinoma of the Breast: An Uncommon Case Report

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Abstract

Cystosarcoma phyllodes of the breast are rare, and it accounts for less than 1% of the malignant tumors of the breast. Its clinical and radiological characteristics are those of benign tumors, and only a fast tumoral growth can evoke diagnosis. The diagnosis is confirmed by anathomopathology and immunohistochemistry. Surgical extended resection is the treatment of choice. Adjuvant radiotherapy may be administered in patients with high-grade tumors, positive surgical margins, or postoperative recurrence. Here we present a case of a woman affected by a sarcoma phyllodes tumor, an uncommon oncologic disease.

Keywords: Sarcoma phyllodes, mastectomy, radiotherapy, immunohistochemistry.

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INTRODUCTION

Phyllodes tumors have an incidence of 1 per 100,000 women and account for only 0.5% of all breast neoplasms [1]. They are classified into benign, malignant, and borderline tumor according to histopathological features [2]; its clinical course is frequently unpredictable. The malignant phyllodes tumor is rare with a lower incidence than the benign counterpart.

Phyllodes sarcomas of the breast have clinical and mammographic signs that are comparable to those of benign lesions; the anatomopathological analysis of surgical parts requires a reference anatomopathologist and immunohistochemistry for the confirmation [3]. Surgical resection remains the gold standard of treatment, whereas radiation therapy and chemotherapy have an undefined role.

In this case report, we discuss a patient who developed a rapidly expanding malignant phyllodes breast tumor. Through this work, we would like to focus on the the circumstances of the occurrence of these tumors, on the difficulties of clinical and paraclinical diagnosis as well as the therapy.

CASE PRESENTATION

We report a case of a 27-years-old female with no history of familiar breast tumor or ovarian cancer, G1P1 1 cesarean delivery for fetal distress. The patient consulted for a painless mass in the right breast that appeared suddenly and rapidly increased in size. The senological examination found a mass in the supero external quadrant of the right breast, measuring 10 cm/9cm painless fixed, without cutaneous sign opposite or galactorrhea. No axillary lymph node was palpable. The examination of the left breast was normal (Fig1).

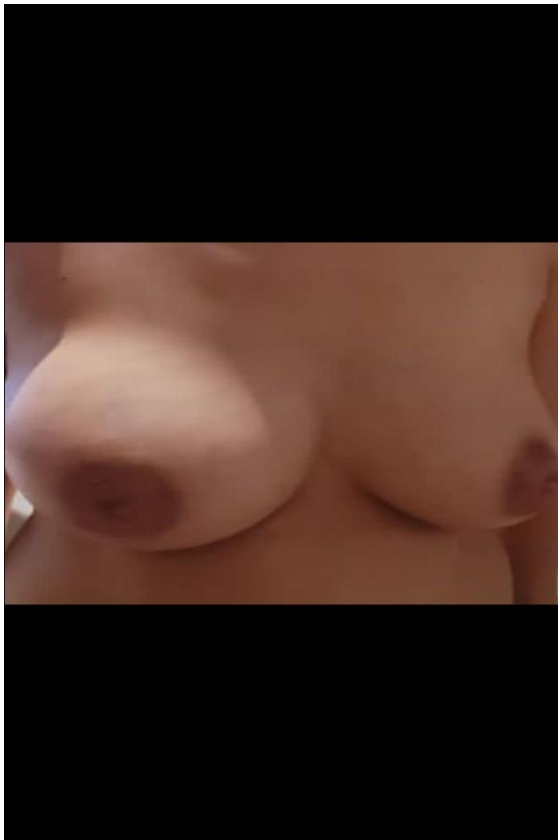


Fig-1: A mass of the right SEQ



Fig-2: The ultrasound appearance of tumor

Mammography+Ultrasonography showed contiguous masses in the superolateral quadrant with

well circumscribed lobulated and heterogeneous contours, highly vascularized by Doppler, requiring a histological confrontation to eliminate a phyllodes tumor (Fig2): ACR4 on the right and 1 on the left. A microbiopsy with immunohistochemistry study was carried out showing a phyllodes sarcoma. An extension evaluation was done: no secondary localisation on thoraco-abdominal-pelvic CT scan.

The right breast and major pectoral muscle were excised (Fig3) with healthy surgical margins on anathomopathological examination. The postoperative course was normal and the patient benefited from adjuvant radiotherapy.

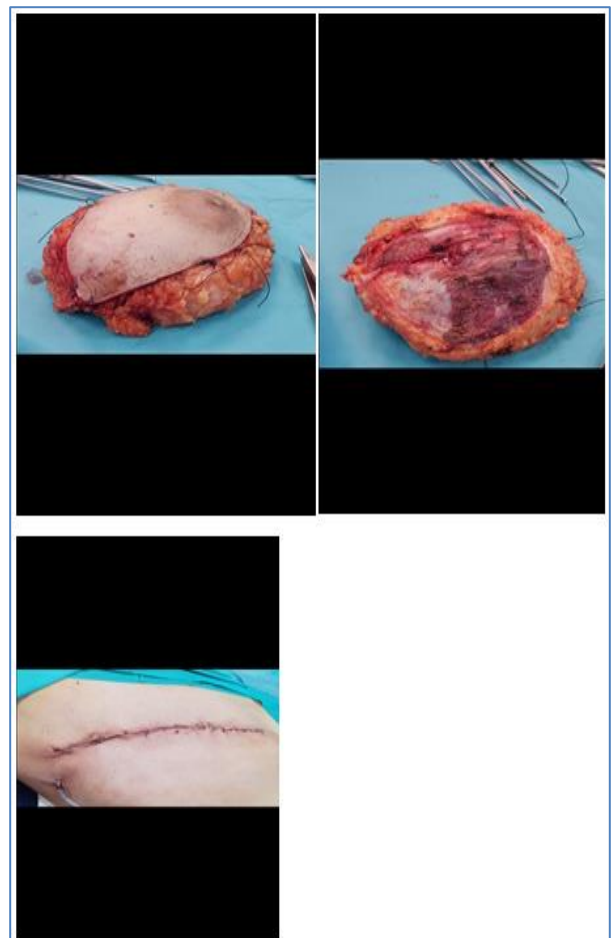


Fig-3: Total mastectomy with excision of the pectoral muscle

DISCUSSION

Phyllodes sarcoma of the breast is rare, less than 1% of all breast cancers breast [4], It differs from primary breast sarcoma by the presence of both epithelial and connective elements at the same time, This is the definition of phyllodes tumors which are classified in three grades: grade I: benign; grade II: borderline and grade III: malignant. The predominance of the conjunctive element is a criterion of malignancy that defines grade III; it is the phyllodes sarcoma [5].

It occurs mainly in middle-aged women. As reported in literature, mean age ranges from 30 to 52 years [6]. The pathophysiology of these tumors remains unknown.

The difficulty in distinguishing between phyllodes carcinomas and benign fibroadenoma may lead to misdiagnosis. In fact, there are no characteristic features that clinically distinguish phyllodes carcinoma from other breast tumors.

The tumor is found in 30% of cases in the in the superior-external quadrant, its size can vary from a few centimeters to several tens of centimeters of long axis, between 1 and 21 cm for Confavreux *et al*. [7]; it is multilobulated and not fixed to the cutaneous or deep plane [7]. In our case, the tumor measures 10 cm; it is located on the right in the superior-external quadrant without associated lymph node involvement.

Lymph node involvement is uncommon for sarcomas, as they rarely metastasize to the lymph nodes [8], but it can occur and can reach 8% of cases [7].

The mammography and ultrasound do not make the diagnosis of phyllodes carcinoma; the diagnosis is mainly histological [9], by microbiopsy or macrobiopsy or on lumpectomy or mastectomy. Immunohistochemistry is currently an indispensable tool for the confirmation of the histological type [10]. In our case, the diagnosis was made by microbiopsy associated with immunohistochemical study.

Surgical treatment is generally the treatment of choice for phyllodes tumors, regardless of its histological subtype. Most studies recommend a more than 1- to 2-cm excision margin [10] based on the evidence that local recurrence occurs more frequently in patients with narrow surgical margins less than 1 to 2 cm, The study of the margins of the surgical specimen is therefore very important, especially in the case of partial conservative surgery. Our patient had a total mastectomy with excision of the pectoral muscle as the tumor was multifocal and infiltrating the muscle.

The postoperative radiotherapy increases the five-year survival rate and decrease the local recurrence rate [12], Currently it is indicated in case of a safety margin less than 10 mm or in case of local recurrence. Several chemotherapy protocols have been used without providing any benefit in terms of survival.

Hormone therapy has not yet been studied for this type of pathology. About our patient, the evolution was favorable without local recurrence or metastasis.

After excision, the prognostic factors of phyllodes sarcoma correspond to the histological grade, surgical margins, and the presence of tumor necrosis. Tumor size would also be a pejorative factor [13].

CONCLUSION

Phyllode sarcoma is a separate entity of breast cancers, it is rare, and it is completely different from epithelial cancer. Its epidemiology is particular as well as it presents difficulties in clinical and paraclinical diagnosis. The treatment is based on surgery which can be a large lumpectomy or a mastectomy, lymph node dissection is unnecessary, and the prognosis depends on several factors, the most important of which is the margins of surgical resection.

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