Recurrence of Primary Breast Sarcoma: A Case Report with Literature Review

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Abstract

Primary breast sarcomas phyllodes are relatively rare; they have a malignant potential with a local and metastatic evolutive risk described. The large surgical exeresis or mastectomy is the main treatment of phyllodes tumors. Local recurrences can occur in the first years after surgery, as can be observed relatively late, which requires codified follow-up. The treatment of local recurrences is a controversial subject. The case has been reported because of its rarity.

Keywords: Primary breast sarcoma; Recurrence

Introduction

Primary breast sarcomas phyllodes are relatively rare; accounting for 1% of breast tumors and less than 5% of sarcomas in all locations [1]. The diagnosis is mostly histological. They classically have a foliated structure hence their phyllode name. They have a malignant potential with a local and metastatic evolutive risk described. The conventional treatment modality is surgical resection. The place of chemotherapy and radiotherapy is still not defined. Due to the advanced techniques of plastic surgery and microsurgery, it is quite possible to reconstruct or recover the resected breast [2].

We report and discuss the case of a 23-years-old woman with a recurrence of primary breast sarcoma: an unusual case.

Case Report

Patient aged 23 years, with no specific pathological history, nulligeste, presented in consultation for breast pain. Echomammography had objectified a suspected phylloide tumor of 25cm/10cm. Following a trocut microbiopsy the anatomopathological study demonstrated a low grade phylloide tumor. A large surgical exeresis made; the pathological examination had concluded in a phylloide tumor of 20cm high grade of malignancy with limits of exeresis to less than 1mm justifying a surgical revision. A mastectomy was done one month after the first act. The pathological examination was in favor of a mammary tumor developed from the mammary stroma (sarcoma) with the epithelial component of the phylloide tumor with respect for the limits of exeresis. The patient was referred to radiotherapy for additional care. Eight months later, the patient has unfortunately presented a sarcomatous recurrence on the mastectomy scar. Benefiting from surgical resection and placement of a flap of the dorsal for reconstruction (Figures 1-4).

Figure 1: Drawing in the breast area: we mark the limitations of the mammary base as well as the level of the sub-mammary sulcus.
Figure 2: Flap rotated from the dorsal area to the anterior thoracic area; to reconstruct the breast.

Figure 3: Breast reconstruction with the autologus latissimus dorsi flap.

Figure 4: Histological feature of mammary stroma showing an infiltrating malignant tumor proliferation with important cellularity is dual component. A: x100; B: x200.
Discussion

Cystosarcoma phyllodes of the breast are rare. It accounts for less than 1% of the malignant tumors of the breast. The average age of discovery of sarcoma varies between 43 and 57.7 years [1]. Clinically, this tumors are in the form of masses limited, painless without axillary lymphadenopathy. Clinical distinction between phyllode sarcoma and fibroadenoma is difficult [2]. Ganglionic involvement is poorly described for sarcomas, given the rarity of lymph node metastases [3]. In mammography, the multiflobed characteristic is evocative of phyllodes tumors with the rare presence of calcifications testifying to tumor necrosis. MRI contributes by detecting signs suggestive of malignancy such as tumor enhancement, and especially the evolutionary character of the tumor volume by comparing with previous imaging [4]. The diagnosis of phylloide sarcoma is histological, by biopsy or even lumpectomy or mastectomy. Phyllodes tumors are defined histologically by the presence of a double epithelial and conjunctive component. The element determining malignancy is widely studied is based on the appearance of the stroma allowing differentiation as well as classifying phyllode tumors into 3 distinct categories (benign malignant and borderline) [5]. The correlations between preoperative radiological diagnosis and histological of the piece are mediocre [5]. The large surgical excerosis or mastectomy is the main treatment of phyllodes tumors. Currently, radiotherapy is indicated in the event of a margin of safety lower than 10 mm in cases of local recurrence, [6] The quality of margins of surgical excision is the main predictor of local recurrence. Local recurrences can occur in the first years after surgery, as can be observed relatively late, which requires codified follow-up. The absence of tumor residue, and transition to margins in sano are the main predictor of local recurrence [7]. The local recurrences have the peculiarity of being more aggressive predisposing to another recidivism. Metastatic recurrences are rare and are described exclusively in malignant tumors. The treatment of local recurrences is a controversial subject. some authors recommend reexamination with possible radiotherapy; others are for systematic mastectomy and others are convinced of the interest of adjuvant radiotherapy [8]. The autologous dorsal flap or latissimus dorsi flap without prosthesis is the most recommended technique. The surgical technique consists in taking the different fatty areas adjacent to the dorsal muscle to allow autologous reconstruction. The flap is a fatty matrix having a trophic effect allowing optimal filling of the resected mammary region [9].

Conclusion

Primary Breast Sarcoma (PBS) is a rare and heterogeneous group of malignancies with limited publications. Although clinical features, mammary adenocarcinoma have a high risk of recurrence and carries a significantly worse prognosis. The diagnosis is histological. Surgical resection is the main therapeutic modality and necessary to establish a definitive diagnosis. Our case is distinguished by the fact that this tumor is extremely rare in the population.

References