



Cystic carcinoma of the breast: a case report and review of the literature

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ABSTRACT

Adenoid cystic carcinoma of the breast is a rare neoplasm, accounting for only 0,1% of all malignant breast tumors. The prognostic is better compared to other breast cancers. We report a case of an adenoid cystic carcinoma of the breast, diagnosed in a 64 year old women who consulted for a nodule of the upper outer quadrant of the right breast associated with mastodynia. The tumor was classified CT2N0M0. An excisional biopsy and extemporaneous histological study were performed. The treatment was completed by a mastectomy with ipsilateral axillary lymph node dissection. The histopathological and immunohistochemical study confirmed the diagnostic of adenoid cystic carcinoma. An adjuvant external beam radiotherapy was delivered to the chest wall at the dose of 50 Gy. The patient is disease free after a follow up of 10 months. Breast adenoid cystic carcinoma has a good prognosis. Because the rarity of this tumor, its treatment is not codified. The aim of our study is to describe the epidemiological, clinicopathological characteristics, the treatment and the prognostic of this rare type of breast tumor.

Keywords: Breast - Adenoid cystic carcinoma – Treatment - Prognosis.

INTRODUCTION

Cystic adenoid carcinoma (CAK) is a malignant tumor that is located predominantly in the salivary glands and upper airways. Breast localization is rare, accounting for 1% of breast cancers. The prognosis remains favorable.

We report a case of breast CAK and discuss the epidemiological, anatomoclinic, therapeutic and evolutionary features.

MATERIAL AND METHODS

Case Report

Patient aged 54, menopausal, consulted following the autopalpation of a right breast nodule gradually increasing in volume for 8 months complicated with mastodynia 2 months ago. The clinical examination found a tumor of 4 × 3 cm of large axis mobile relative to the two planes

cutaneous and muscular, without inflammatory signs opposite, sitting at the level of the supra-external quadrant of the right breast. Examination of the left breast and bilateral supraclavicular and axillary lymph nodes did not find any palpable mammary nodule or lymph nodes. The tumor was classified as CT2N0M0. Mammography (FIG. 1) demonstrated a supetibility of 28 mm of the major axis of the QSE of the right breast suspected of malignancy. A biopsy excision with extemporaneous study was performed, supplemented with a right mastectomy with axillary axillary lymph node dissection before diagnosis of malignancy. The macroscopic study showed a nodule of 3cm of yellowish appearance, and under microscopic study, a tumor proliferation organized in spans, in small clusters and in masses with rare acini, it is made of cells with rounded or oval nucleus presenting slight atypies with rare mitoses, Without vascular emboli. The lymph node dissection has reduced 13 reaction ganglia. Exercise limits. At immunohistochemistry, the cells overexpressed the anti-CD117 antibody and the anti-CK7 antibody. Hormone receptors as well as HER2 were not expressed. An extension report including abdominal ultrasound and chest X-ray were normal. Adjuvant radiotherapy on the right chest wall was performed at the 50gy dose in conventional splitting, 2gy per session and five sessions per week. Treatment was well tolerated. After a 12-month follow-up, the patient is still alive without disease.

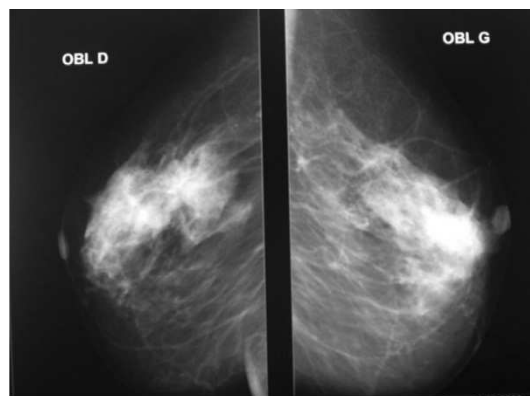


Figure 1. Mammographie bilatérale: suropacité du quadrant supéro-externe du sein droit mal limitée sans microcalcifications suspecte de malignité.

RESULTS AND DISCUSSION

The breast CAK is a Tumorrare representing less than 1% of breast cancers and most articles published on the subject are isolated cases or small series [1,2].

The mammary CAK is histologically superimposable to that of the salivary glands but also to other sites such as the trachobronchial tree, the sinuses, the glands Bartholin, cervix, prostate, lacrimal glands and skin.

It mainly affects women. The age of occurrence varies from 30 to 90 years with a peak frequency between the fifth and sixth decades. The age of our patient was 54 years. The most frequent revealing sign of mammary CAK is usually a mobile, limited mammary nodule, which is confusing with adenofibroma (3, 4). Nearly 24% of tumors are described as sensitive; This pain has been attributed to the peri-nervous gangling by the tumor (5).

The mammography aspects are not specific and are identical to the other carcinomas, a suggestive element however being the absence of micro calcifications (6).

The histological aspect (figure 2) is compatible with that of CAK in these usual localizations, made up of two components: small basaloid and epithelial cells. The architecture is cribiform with

pseudocysts, tubular, trabecular or massive.

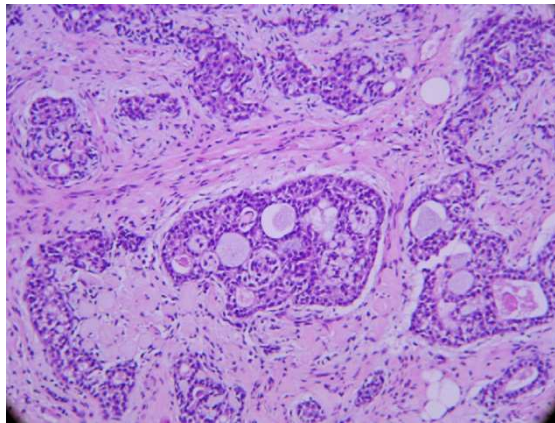


Fig 2: massif of cells centered with glandular cavities, sometimes containing hyaline cylinders. (12)

At immunohistochemistry, the basaloid contingent may be marked by vimentin, smooth muscle actin, calponin and epithelial contingent express pancytokeratins. The search for hormonal receptors is negative. Histological axillary lymph node involvement is exceptional, ranging from 0.8 to 6.7%, which does not recommend routine dissection (7,8), even though we have practiced it in our patients , Due to the tumor size and the diagnostic difficulty in extemporaneous. The CAMmammaine fulfills the same diagnostic criteria as

The triple-negative mammary carcinoma of basal phenotype (RE-, RP-, Her-2-neu-, CK5 / 6 +, KIT +). Nevertheless, its prognosis

is considerably more favorable than that of triple-negative infiltrating ductal carcinoma [9]. The therapeutic management is not yet coded because of the rarity of this tumor. Ro et al. [10] classified the breast CAK as a percentage of solid elements quantified on the tumor biopsy in three grades and proposed three therapeutic strategies: a lumpectomy for grade I (absence of solid elements), a mastectomy for grade II (<30% solids) and for grade III (> 30% solids), a mastectomy with axillary dissection. Radiation therapy is indicated to improve local control especially after concurrent treatment. Hormone therapy is not indicated due to the lack of consistent expression of hormone receptors. There are no studies in the literature evaluating the role of adjuvant chemotherapy in this type of tumor.

CAK is considered a mammary tumor with low potential for malignancy. Its prognosis is more favorable than outside the breast, especially in the salivary glands and the airways. The rate of local recurrence is low, it varies from 7.7 to 31% according to literature studies. Remote metastases are rare in the order of 8% [1,11]. The overall survival rate is favorable; Arpino et al. Have reported rates of 93.8% at ten years (1).

CONCLUSION

CAK of the breast remains a rare tumor of good prognosis, the treatment of which is still poorly established requiring the inclusion of patients in therapeutic trials in order to determine the optimal treatment adapted for this pathology.

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