

HAMARTOMA OF THE BREAST: A CASE REPORT AND REVIEW OF THE LITERATURE

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ABSTRACT

Hamartoma of the breast is a rare benign lesion composed of a variable amount of adipose, fibrous and glandular tissue. We report a case of breast hamartoma in a 48-year-old female patient, discovered following autopalpation of a mass in the right breast. In the light of this observation, we discuss the data in the literature. Hamartoma does not always have a clinical translation. The diagnosis is usually made on mammography. Ultrasound is not useful for diagnosis. Biopsy is not necessary for diagnosis and excision is unnecessary (except for possible aesthetic problems).

KEYWORDS: Hamartoma, Breast, Mammography, Ultrasound.

INTRODUCTION

Hamartoma of the breast is a rare, benign lesion that is described under different names (fibroadenolipoma, lipofibroadenoma, adenolipoma, breast in the breast). This lesion is considered a developmental abnormality and not a tumor. It is often unrecognized and of difficult histological diagnosis in the absence of specific signs. The histological and radiological aspects are variable and depend on its adipose tissue content.^[1]

Clinical case

A 48-year-old female patient, married, mother of 3 children. No personal or family pathological history. She consulted for the discovery of a right breast mass. The examination showed a mass in the superolateral quadrant of the right breast measuring 10 cm in long axis, of soft and elastic consistency, of the same texture as the rest of the breast, painless, well limited, mobile in relation to the

two superficial and deep planes, without inflammatory signs in front of it or associated nipple discharge. Examination of the contralateral breast was unremarkable. The lymph nodes were free.

Mammography showed a large mass in the superolateral quadrant of the right breast with a density similar to the density of the breast, pushing back the parenchyma opposite.

Ultrasound revealed an oval structure with a clear and regular contour and mixed conjunctivoglandular and adipose content opposite the opacity on the right.

The diagnosis of hamartoma was then evoked. The patient underwent a lumpectomy (**Figure 1**) and the diagnosis of hamartoma was confirmed on histological examination of the surgical specimen.

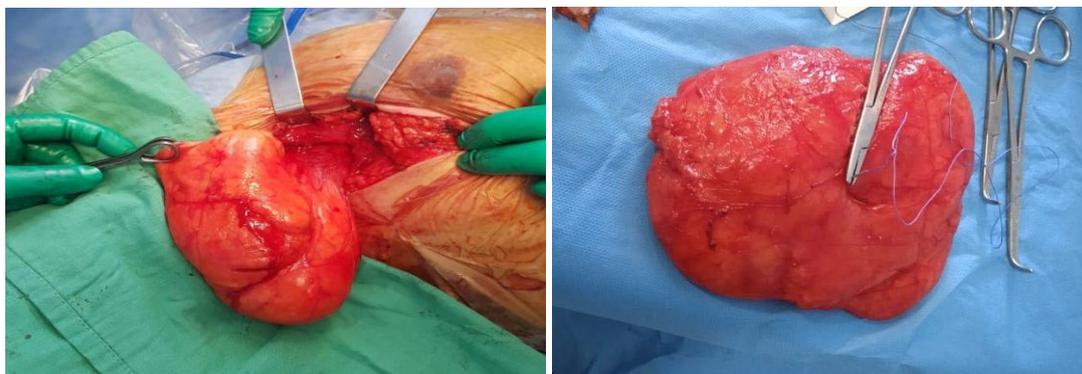


Figure 1: Hamartoma of the breast.

DISCUSSION

Hamartoma is a particular breast lesion first described by Arrigoni *et al.*^[2] in 1971. The incidence of this pseudo tumor is estimated at 0.7% of benign lesions of the breast in women. However, its prevalence seems to be increasing thanks to mammographic screening.^[3]

Its size is variable, from a few millimeters to more than 10 cm. It can be observed at any age but particularly in perimenopause.

Clinically, the lesion may be undetectable, as its texture does not differ from that of the surrounding breast tissue, or it may appear as a soft, mobile mass that is not painful. When its size is large, it distorts the breast.^[4]

The mammographic appearance in typical forms is pathognomonic and is called "sausage slice"; it is a well circumscribed opacity surrounded by a clear halo corresponding to a pseudocapsule.^[5] In fact, the appearances are related to the amount of conjunctivoglandular tissue and the extent of edematous and/or dystrophic reactions.

Ultrasound is not helpful in the diagnosis; it shows a mass of variable echostructure surrounded by a hyperechoic border, with displacement of neighboring structures. Most often, there is no posterior enhancement or attenuation cone.

Magnetic resonance imaging (MRI) is not classically indicated but may be requested in case of lesion of undetermined appearance on mammography and ultrasound.

Anatomopathological examination confirms the diagnosis. It is based on a number of arguments. Macroscopically, this lesion is well limited, generally encapsulated, measuring between 1 and 20 cm in long axis. Its surface is smooth and its consistency is firm to soft. On section, it appears pearly white or yellowish-gray. Histologically, it gives the impression of a "breast within a breast".^[4] Indeed, it is made up of lobules in variable quantity scattered without order, cysts, sometimes in apocrine metaplasia and connective tissue. This connective tissue is dense, fibrous and sometimes hyaline, forming a ring-like arrangement around the acini. The amount of adipose tissue is highly variable, representing between 5 and 90% of the lesion surface, and sometimes absent. However, the presence of adipose tissue has been reported in 90% of cases.^[6]

Several associated lesions have been noted, in particular, pseudoangiomatous stromal hyperplasia (PASH), which should lead to the diagnosis.^[5] This is present in 20 to 71% of cases.^[5] Cysts, apocrine metaplasia, in situ or invasive, ductal or lobular carcinoma have also been observed, hence the importance of careful specimen sampling [3]. More rarely, smooth muscle differentiation has been reported, referred to as myoid hamartoma.^[7]

Similarly, microcalcifications, stromal edema and giant cells have been described. However, none of these criteria is specific. In sum, it is the presence of fibrous tissue within and between the breast lobules, or fibrous or adipose tissue in the pallial tissue with or without PASH, in a suggestive clinico-radiological context, that should raise the suspicion of a hamartoma.

The differential diagnosis is made at the clinico-radiological stage, with other fibroepithelial lesions such as adenofibroma, periductal stromal sarcoma and low grade phyllodes tumor. However, careful macroscopic examination coupled with careful histological analysis will help to correct the diagnosis.^[5,8]

The treatment is surgical excision. Indeed, thanks to its well circumscribed character, this lesion is easily enucleated without resorting to reconstructive surgery even in case of a large mass.^[8,9]

The prognosis of breast hamartoma is good with a benign evolution without tendency to recurrence.^[4,5] The presence of glandular tissue in the lesion makes the development of cancer in the hamartoma possible, but not more important than in the rest of the breast tissue.

CONCLUSION

The breast hamartoma is a benign lesion whose diagnosis of certainty is exclusively anatomopathological. However, the clinical-radiological confrontation remains necessary. The contribution of biopsy in the case of hamartoma remains limited. If the hamartoma is large and unsightly, plastic surgery can of course be performed.

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