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CASE REPORT/OLGU SUNUMU

MAMMARY HAMARTOMA ASSOCIATED WITH FIBROADENOMA

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MEMEDE HAMARTOM FİBROADENOM BİRLİKTELİĞİ

ÖZET

Memenin hamartomları nadir görülen ve palpabl kitle oluşturan benign lezyonlardır. Bu lezyonların doğru tanınabilmesi için klinik, radyolojik ve histopatolojik korelasyon gereklidir. Hamartomlar memenin diğer benign lezyonları ile birlikte görülebileceği gibi, çok nadiren maligniteler de bunlara eşlik edebilir. Burada, 39 yaşında bir kadın hastada tek bir lezyon şeklinde kendini gösteren, fibroadenom içersinde gelişmiş bir hamartom olgusu, radyolojik ve histolojik özellikleri ile birlikte sunulmuştur.

Anahtar sözcükler: hamartom, fibroadenom, meme, nadir meme lezyonları

ABSTRACT

Mammary hamartomas are rare benign lesions that present as palpable masses. Clinical, radiological and histopathological correlation is required for correct identification of these lesions. Hamartomas may be associated with other benign lesions of the breast, and in very rare cases can coincidental malignancies occur. Herein, we describe a unique case of mammary hamartoma that has developed in a fibroadenoma, which appears as a single lesion in a 39 year-old female, with both radiological and histological features.

Keywords: hamartoma, fibroadenoma, breast, unusual breast lesions

Introduction

Mammary hamartomas are benign lesions composed of a variety of normal breast components arranged in a disorganized manner. These rare breast lumps, also known as fibroadenolipoma or adenolipoma, are usually painless, well-circumscribed, mobile masses with a soft consistency. Because they do not have specific diagnostic histological features, clinical or radiological correlation is very important in diagnosing hamartomas (1). The most widely used imaging techniques, mammography and ultrasound, usually display well-circumscribed encapsulated masses with lobulated or smooth borders, some of which contain fibrofatty density. Although these lesions are benign, local recurrences have been reported (1-3). Moreover, on exceedingly rare occasions, they may be associated with coincidental malignancy. There are less than fifteen cases of mammary hamartomas reported to be involved by incidental, coexisting carcinoma (4-7). Herein, we describe a unique case of mammary hamartoma (adenolipoma) that has developed in a fibroadenoma, which appears as a single lesion, with radiological and histopathological features, in a 39 year-old woman.

Case presentation

A 39 year-old woman presented with a lump in her right breast. The mammogram revealed a relatively well-defined oval mass, that included another small lesion at its periphery consisting of mixed fibrofatty density (Figure 1). Ultrasound of the mass showed a smoothly marginated isoechoic lesion with hipoechoic areas. At the periphery of this lesion, a well-defined isoechoic second lesion was apparent (Figure 2). Excisional biopsy of the breast lump revealed a lesion of 4x3.2 cm that was well-circumscribed, nodular, shiny, and partly mucoid appearing. Another small lesion measuring approximately 2.5x1.5 cm, that had a lipomatous appearance was present at the periphery of the big lesion (Figure 3).

Histologic sections of the well-circumscribed big lesion showed fibroadenoma consisting of compressed duct structures in a myxoid, loosely cellular stroma. Inside this fibroadenoma was a sharply demarcated hamartoma (adenolipoma) with a pseudocapsule, consisting of randomly scattered duct structures in an extensive adipose tissue (Figure 4). The case was diagnosed as mammary hamartoma (adenolipoma) located in a fibroadenoma.

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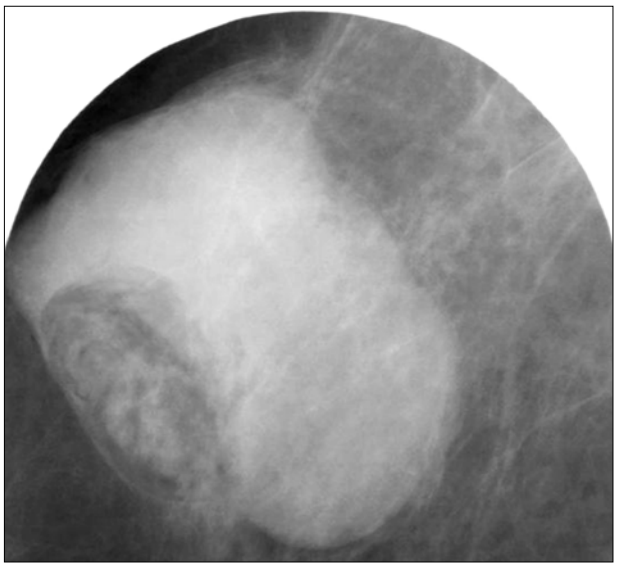

Figure 1. Craniocaudal mammogram reveals a lesion with well-defined margin, in which an area of mixed density is identified at the periphery.

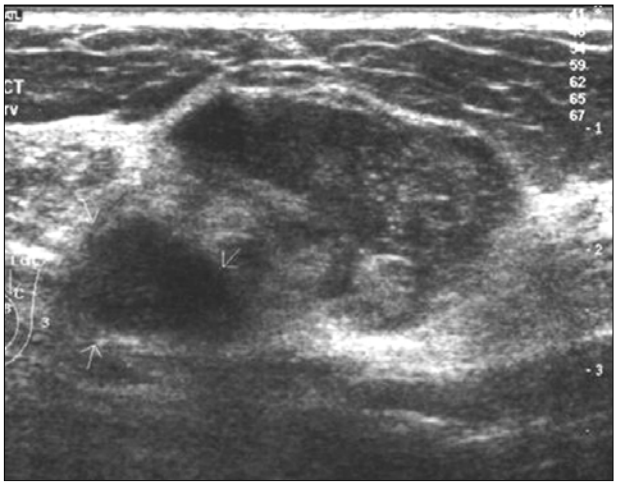

Figure 2. Sonogram of the lesion displays a smoothly marginated and isoechoic mass with hipoechoic areas. There is a well-defined isoechoic second lesion shown with arrows.

Discussion

Mammary hamartomas are rare benign lesions that are composed of varying amounts of glandular, fibrous, adipose and smooth muscle tissue. Although they are reported to have an incidence of 0.1-0.7%, because of increasing use of screening methods and increasing recognition both clinically and radiologically, the real incidence is estimated to be higher (2,3). It is known that hamartomas result more from improper development in the organ rather than from tumorous process.

The most characteristic histological feature of hamartomas is the presence of lobules within a fibrotic stroma (1). The amount of adipose tissue within the stroma usually comprises about 10-20% of the entire lesion. Although in most series adipose tissue is present in more than 90% of the cases, it is not a prerequisite for the diagnosis of hamartoma by either pathologic examination or imaging (1,2,8).

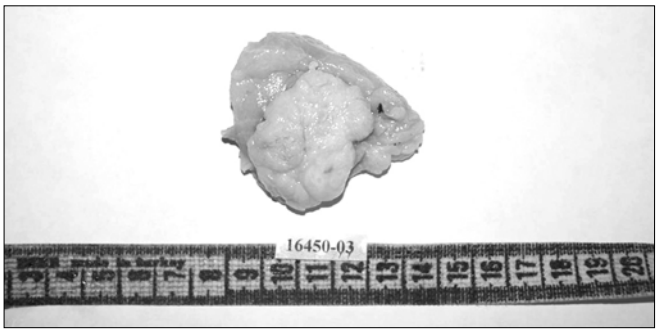

Figure 3. Macroscopic image of the specimen shows a well-circumscribed, nodular, shiny, grayish lesion, and another smaller lesion with lipomatous appearance at the periphery.

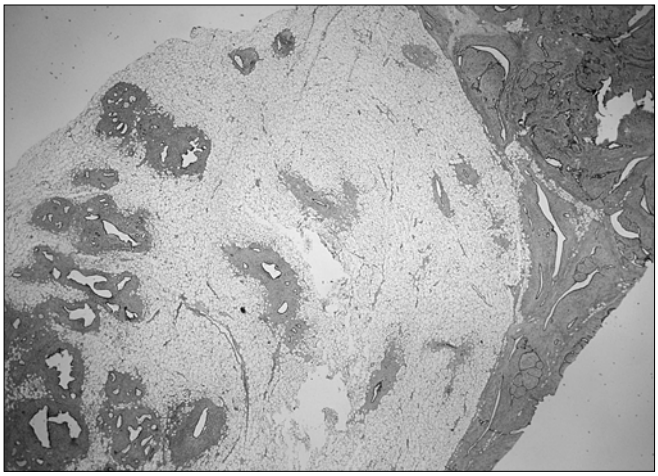

Figure 4. Photomicrograph showing adenolipoma *(lower left)* in a fibroadenoma *(H-E, x20)*.

Coincidental malignancy, very rarely, can occur in mammary hamartomas. However, it is still not clear whether malignant lesion derives from the hamartoma itself, or is an incidental finding, that initiates growing nearby and extends into the hamartoma afterwards (4,7).

Fibroadenomas are benign fibroepithelial neoplasms of the breast composed of both stromal and epithelial components. They are among the most common breast lesions in United States. The exact cause of fibroadenomas is unknown, however, their development is considered to be a hyperplastic or proliferative process influenced by estrogen (9). They may resemble mammary hamartomas both clinically and radiologically. However, fibroadenomas, in contrast to hamartomas, demonstrate more ductal proliferation, the lobules are distinctly rare, and the stroma is less cellular (2,9). In a case series of mammary hamartomas reviewed in our institution, within a 13-year period, we found 4 of 21 cases associated with fibroadenoma (10). Association of fibroadenoma and hamartoma may be due to either hormonal imbalances and/or developmental abnormalities. This association as a single lesion in the breast, like in our case, although not indicating any clinical significance, has a distinct radiological and histological appearance. Our patient did not have any additional treatment after surgical excision, and she is free of disease after 7 years of clinical follow-up.

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