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CHONDROLIPOMATOUS TUMOUR, A HISTOLOGIC VARIANT OF MAMMARY HAMARTOMA, PRESENTING AS CALCIFICATIONS IN MAMMOGRAPHY AND ULTRASONOGRAPHY

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Chondrolipomatous tumours are rare benign neoplasms consisting of adipose and cartilage tissue, and only a few cases have been reported. Physical examination, ultrasound and mammography usually reveals a fibroadenoma. Despite imaging modalities, it is not often possible to differentiate these lesions from fibroadenomas and breast carcinomas. In these cases excision is necessary as well as useful in providing an exact diagnosis. We describe a young patient with chondrolipomatous tumour of the breast, in which the cartilage was calcified focally.

HİSTOLOJİK OLARAK HAMARTOM VARYANTI OLAN MAMOGRAFİK VE ULTRASONOGRAFİK OLARAK KALSİFİKASYON SAPTANAN MEMENİN KONDROLİPOMATÖZ TÜMÖRÜ- OLGU SUNUMU

ÖZET

Kondrolipomatöz tümörler nadir görülen selim tümörler olup yağ ve kıkırdak dokuları içerirler. Fizik muayene, mamografik ve ultrasonografik incelemeler sıklıkla fibroadenomu düşündürür. Bu tanı yöntemlerine karşın bu lezyonlar sıklıkla fibroadenomlardan ve meme kanserlerinden ayrılamazlar. Bu olgularda tanı ve tedavi ancak eksizyonel biyopsi ile sağlanabilir. Bu yazımızda, kartilaj doku içinde fokal kalsifikasyonun saptandığı genç bir kondrolipomatöz tümör olgusunu sunmayı amaçladık.

Introduction

Chondrolipomatous tumours are rare benign mammary hamartomas consisting of adipose and mature cartilage tissue (1, 2). Additionally, cartilage is present in chondromyolipoma, intraductal papilloma, fibroadenoma, phylloid tumor and mammary hamartoma (1-5). Cartilage tissue is seen in the human breast infrequently, and is associated mainly with malignancies, such as sarcoma and metaplastic carcinoma (6).

To our knowledge only 13 cases of chondrolipomatous tumour of the breast had been previously reported in the English language literature (7-18). We observed the youngest breast chondrolipoma case. In this case the cartilage was calcified focally, and this feature reported only in two cases previously (14,17).

Case history

A 28-year-old woman admitted to the hospital because of left breast pain and nipple discharge. There was no pathological finding in physical examination of the breasts. Lymph nodes were not palpable in the both axilla.

Mammographic examination showed a well-circuscribed mass with dystrophic calcification in the lower inner quadrant of the left breast (Fig 1). Diğer alanlar lipomatö meme paternine sahip olup ek kitle konfigürasyonu saptanmadı. The right breast was unremarkable. A sixteen milimeters diameter hyperekojen, içinde amorf kalsifikasyonlar bulunan mass was determined in ultrasonography (Fig 2). The ultrasonographic differential diagnosis included fibroadenoma and fibroadenolipoma. Mammography revealed a illdefined mass with calcification. The possibility of mammary carcinoma could not be completely excluded.

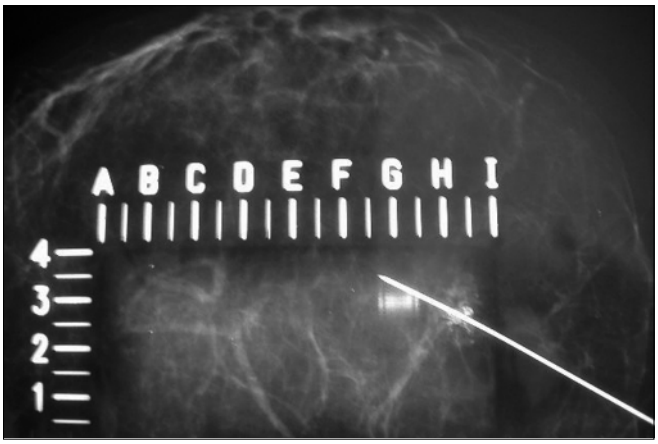

Figure 1. Mammographic examination revealed a illdefined mass with dystrophic calcification.

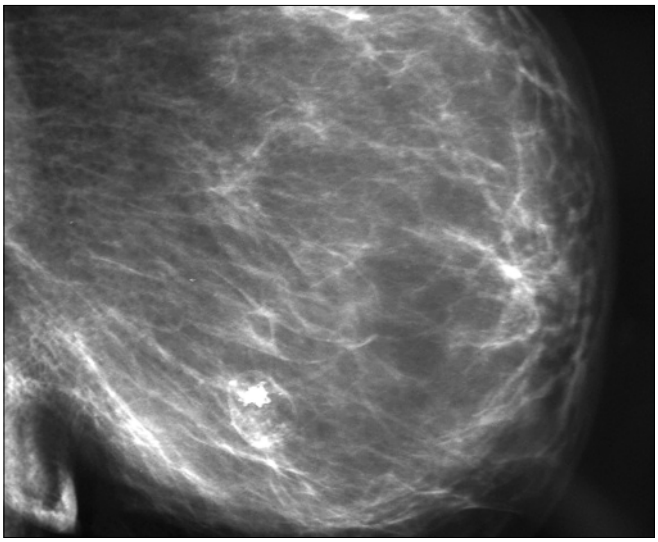

Figure 2. Ultrasonographic examination demonstrates a regular small mass with calcifications.

The lesion excised with a needle guide, which signed by mammography (Fig 3).

Macroscopically the excision biopsy specimen was solid and measured 1.5x1x1cm. It was well- circumscribed and its cut surface was yellow-beige. Histologically a well circumscribed mass composed of regular shaped lobules of mature cartilage and benign adipose tissue. Beside the fat and cartilage tissue mammary tissue was found but not calcification (Fig 4). There was no histological evidence of malignacy, such as cellular atypia, mitotic activity or necrosis.

Discussion

Benign cartilage-containing breast lesions are uncommon (1-5). The two common variants of mammary hamartoma are adenolipoma and chondrolipoma (5). Their classification and nomenclature are confusing. The question of whether these lesions are neoplasms or hamartomas are undecided. Kaplan and Walts (7) discussed the cartilage-containing breast lesions findings of seven previously reported cases with different diagnosis. They first suggested the term "benign chondrolipomatous tumour". Metcalf and Ellis (19) were used the term "choristoma" firstly. Finally, Fushimi *et al.* (15) suggested that "the term of chondrolipoma is more reasonable than choristoma", because it represent the character of the tumour more precisely (15).

Chondrolipomas are generally seen after 50 years old, postmenopousal women (14). This is the youngest reported case in the literature. Size of the tumour is between 2 and 6 cm in diameter. Physical examination, ultrasound and mammography usually reveals a fibroadenoma (18). In two previous cases in the literature, focal calcifications were present (14,17). Similarly, these calcifications were found either in mammography or ultrasonography in our case. Despite mammography and ultrasonography, it is not often possible to differentiate these rare lesions from fibroadenomas and breast carcinomas. Our case expands the differential diagnosis of mammographic and ultrasonographic calcifications.

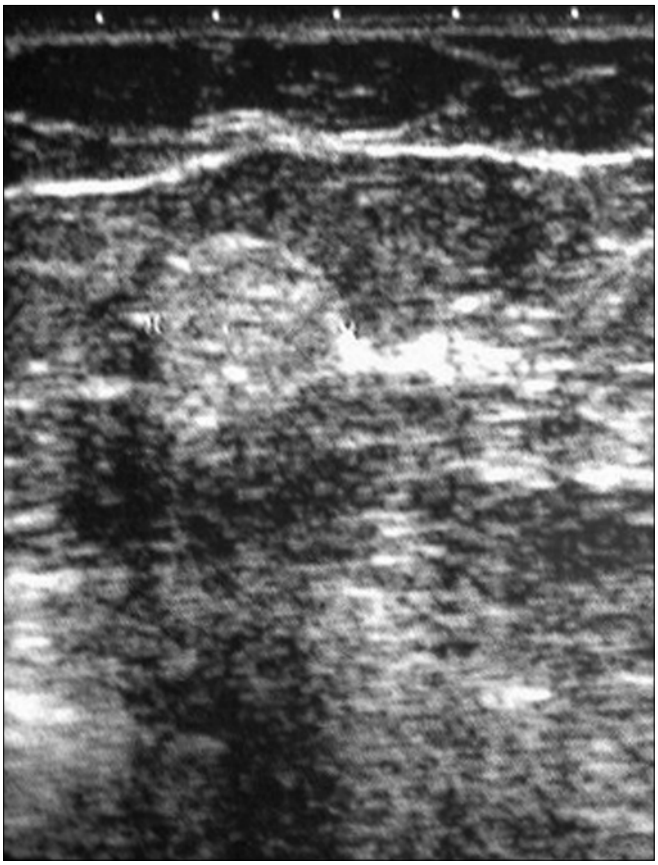

Figure 3. The lesion excised with a needle guide, which signed by mammography.

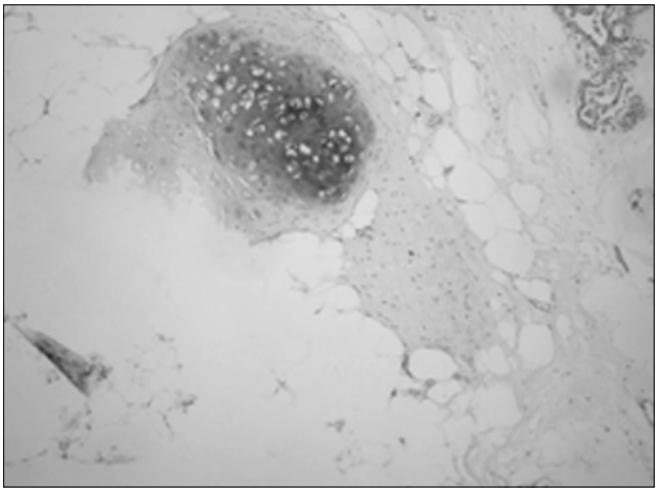

Figure 4. Mature hyaline cartilage distributed in fat and glandular mammary parenchyma (H&EX10).

Microscopic examination reveals well defined shaped islands of mature hyaline cartilage distributed in fibroglandular mammary parenchyma (15,16). In some cases, besides the fat and cartilage tissue, the presence of compressed mammary tissue may be found (18).

In conclusion, chondrolipomatous tumours of the breast are benign and only a few cases have been reported in the literature. However, these benign lesions needs to be differentiated from the malignant breast lesions. Mammography and ultrasonography can not differentiate these rare lesions from breast carcinomas every time. Excision is necessary as well as useful in providing an exact diagnosis.

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