The Journal of Breast Health
meme sağlığı dergisi

The Journal of Breast Health 2010 Vol: 6 • No: 4
Meme Sağlığı Dergisi 2010 Cilt: 6 • Sayı: 4

CASE REPORT/OLGU SUNUMU

A RARE CASE: BILATERAL PHYLLODES TUMOR OF BREAST (METACHRONOUS AND SYNCHRONOUS)

Enver İlhan[1], Nuket Eliyatkın[2], Elif Selek[2], Arsenal Sezgin[2], Volkan Tekin[1], Cemil Yaylalı[1], Hakan Postacı[2], Mehmet Yıldırım[1]

[1]SB İzmir Bozyaka Eğitim ve Araştırma Hastanesi, Genel Cerrahi, İzmir, Türkiye
[2]SB İzmir Bozyaka Eğitim ve Araştırma Hastanesi, Patoloji, İzmir, Türkiye

Bu çalışma, Presented as a poster in the 10th National Congress on Breast Diseases on 30.09-04.10.2009 in Cesme, Izmir

NADİR BİR OLGU: MEMENİN BİLATERAL FİLLODES TÜMÖRÜ (METAKRON VE SENKRON)

ÖZET

Memenin fillodes tümörü nadir olup genellikle genç kadınlarda görülür. Bilateral görülme oranı da oldukça düşüktür. 7 yıl önce sağ memesinde kitle nedeniyle ameliyat edilen ve histolijik olarak benign filloides tümör tanısı alan 31 yaşındaki kadın hastanın takibinde sağ ve sol memesinde senkronize kitleler tespit edildi. Her iki memedeki kitleler temiz cerrahi sınır ile çıkartıldı. Histolojileri Filloides tümör olarak açıklandı. Sağ memedeki birinci ve ikinci tümör metakron, sol memedeki tümör ile sağ memedeki ikinci tümör senkron tümör olarak kabul edildi. Hastalığın önemine, bilateral bulunabileceğine ve cerrahisine dikkat çekmek amacıyla olgumuzu sunduk.

Anahtar sözcükler: meme, fillodes tümör, bilateral, senkron, metakron

ABSTRACT

Phyllodes tumors of the breast are rare and most often occur in young women. Bilateral occurrence is very rare. A 31-year-old female patient was operated on 7 years ago due to a mass in her right breast and was histologically diagnosed as benign phyllodes tumor. In her follow-up, synchronous masses were detected in her right and left breast. The masses in both breasts were excised with intact surgical margins. The histopathological examination revealed "Phyllodes tumor". The first and second tumors in the right breast were accepted as metachronous, while the tumor on the left breast and the second tumor on the right breast were considered to be synchronous tumors. We present our case to draw attention to the significance of the disease, its possible bilateral occurrence, and surgery.

Keywords: breast, phyllodes tumor, bilateral, synchronous, metachronous

Introduction

Phyllodes tumors of the breast are rare with a very low rate of bilateral occurrence. It usually occurs in young women. It is a biphasic tumor of the breast. Its etiology and pathogenesis are not exactly clear (1). The malignant form of the phyllodes tumor is an aggressive type of breast tumor. Due to the rarity of the disease, it has no specific treatment method. Excision with large and safe surgical margins is an indispensable element in treatment. Since these tumors rarely metastasize to axillary lymph nodes, there is no indication for axillary dissection. The role of adjuvant radiotherapy and chemotherapy is controversial.

Case

A 24-year-old female patient presented with a mass in her right breast. Her physical examination and ultrasonography revealed a solid, mobile mass of about 2 cm with regular margins which was compatible with fibroadenoma in the upper external quadrant of the right breast. Axillary examination was normal. The mass was excised following local anesthesia. Tumor size was 2x1.5x1 cm. Histopathology was found to be consistent with a benign phyllodes tumor.

In the follow-up, 7 years later, her physical examination and ultrasonography revealed two solid masses with regular margins, one of 2 cm in the upper external quadrant of the left breast and the other of 2 cm in the upper external-lower external quadrant combination of the right breast. Bilateral axillary examination was normal. The masses in both breasts were totally excised with safe surgical margins.

The mass in the left breast was of 1.7x1.5x1.2 cm. Histopathologic findings were compatible with phyllodes tumor were monitored in cross sections. The lesion displayed a slightly cellular characteristic in focal areas. 2 mitoses were counted in 10 high power field. No necrosis was observed (Figure 1).

The mass in the right breast had a size of 2x2x0.7 cm. Moderate stromal cellularity was observed. Stromal cells largely had minimal atypia with moderate atypia in focal areas. 1 mitosis was detected in 10 high power field. No necrosis and hemorrhage were observed (Figure 2). Immunohistochemical stains show that estrogen receptor was (-), while progesterone receptor was 95% (+) in

Gönderilme Tarihi: 16 Kasım 2009 • **Revizyon Tarihi:** 06 Aralık 2009 • **Kabul Tarihi**: 07 Aralık 2009

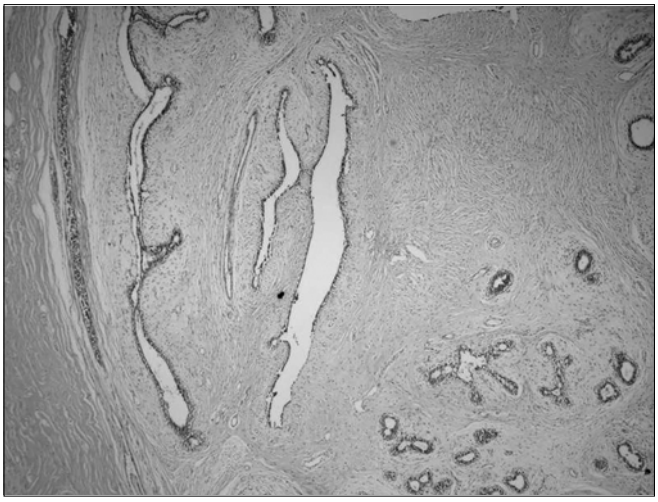

Figure 1. Phyllodes tumor showing minimal stromal cellularity in periductal region (H&E x40).

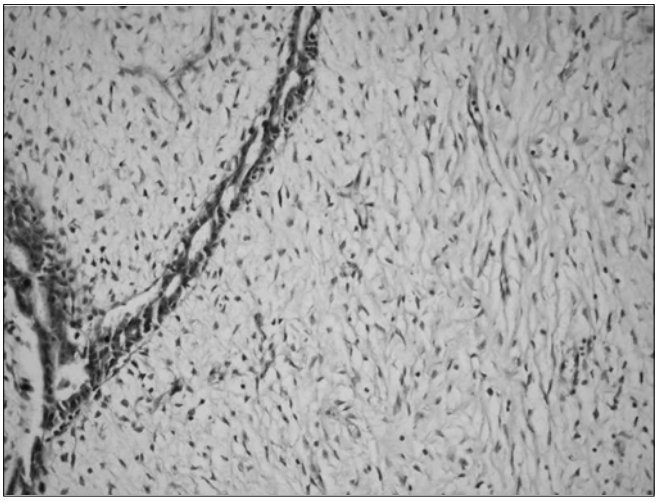

Figure 2. Phyllodes tumor with moderate stromal cellularity and minimal atypia. (H&E x200)

the epithelium. p53 was found to be 3% (+) in epithelial areas and 1% (+) in stroma. Ki67 was 8% (+) in epithelial areas and 2% (+) in the stroma. Since the tumor in the left breast was 1 mm away from the surgical margin, cavity excision was repeated and no residual tumor was detected. It was found that the second phyllodes tumor excised from the right breast developed in a different area than the first tumor previously excised from the same breast. Phyllodes tumors in the right breast were evaluated as metachronous, while the second tumors in the left and right breast were evaluated as synchronous tumors. Systemic scanning revealed no metastasis. The patient is still under follow-up.

Discussion

Phyllodes tumors of the breast account for 0.3-0.9% of all breast tumors and of these, only around 3% are bilateral. Bilateral tumors, either synchronous or metachronous, are generally either benign or malignant (2,3,4). Marti and Hiotis present the first reported case of multiple, bilateral phyllodes tumor of the breasts in an adolescent girl (5).

It usually occurs among young adults and women. It is a fibroepithelial tumor of the breast. Clinically, macroscopically and microscopically, it resembles fibroadenoma. While fibroadenoma almost never recurs, recurrence is frequent in phyllodes tumor when incomplete excision is performed. Exact diagnosis is made microscopically (6,7).

Grading of phyllodes tumor is based on semi-quantitative assessment of stromal cellularity, cellular pleomorphism, mitotic activity, magrin appearance, and stromal distrubution. Tumors with modest stromal hypercellularity, little cellular pleomorphism, 0-4 mitoses in a 10 high power field, well circumscribed, pushing margins, and minimal or moderate stromal overdevelopment are classified as "Benign". "Borderline" tumors are defined as tumors representing modest stromal hypercellularity, moderate cellular pleomorphism, 5-9 mitoses in 10 high power field, intermediately infiltrated margins, and moderate stromal overgrowth. "Malignant" tumors show marked stromal hypercellularity and cellular pleomorphism, more than 10 mitoses in 10 high power field and marked stromal overgrowth(8).

Preoperative diagnosis of these rare cases is important to determine the surgical approach.

Mammography, ultrasonography, FNAB, and frozen section are inadequate for diagnosis.

Although FNAB is not preferred among the preoperative histopathological diagnostic methods for phyllodes tumors due to high false negativity, the results of core biopsy are found to be more reliable for diagnosis (9-11).

The primary aim in treatment is to minimize local recurrence risk and provide cure. Age, tumor size, surgical approach, surgical margins smaller than 1 cm, mitotic activity and increased stromal cellularity have been identified as factors that increase local recurrence rates (12,13). Therefore, tumors should be excised with large and sound surgical margins without tumor. In cases with benign phyllodes, treatment is completely surgical and breast-preserving surgery should be preferred.

Local recurrence treatment fails in many patients. Mastectomy without axillary dissection is recommended as a standard treatment for malignant cystosarcoma phyllodes tumor. The possibility of local recurrence and metastasis is 6-10% in benign phyllodes tumors, 25-32% in borderline phyllodes tumors, and over 25% in malignant phyllodes tumors (14,15). Stromal overgrowth, stromal atypia, mitotic activity, surgical margin of tumor, heterologous stromal component and histologic grade are significantly corre-

lated with metastasis. Lungs and the bone are the most common sites for metastasis (16-20).

In high-risk patients with malignant histopathology, the role of adjuvant treatment after adequate surgery is controversial and no complete consensus has been reached on postoperative chemotherapy and radiotherapy (21). In MD Anderson Cancer Center, radiotherapy is recommended only for cases with positive or near-positive surgical margins and selected cases for who further surgical procedures cannot be performed. As for the overall survival rates in cases with phyllodes; in benign and malignant phyllodes tumors in MD Anderson series, 5-year overall survival rate was determined to be 91% and 82%, respectively (16).

In patients diagnosed with a mass in the breast to be treated by surgical diagnostic method, a phyllodes tumor should be kept in mind, appropriate surgical procedure should be selected to reduce re-operations and perform definitive treatment, and the opposite breast should also be carefully evaluated.

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İletişim

Enver İlhan
Tell : 0 232 247 42 63
E-Posta : enverhan60@gmail.com