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CASE REPORT/OLGU SUNUMU

CHEST WALL RELAPSE OF DUCTAL CARCINOMA IN SITU AFTER MASTECTOMY: A CASE REPORT

Bektaş Kaya[1], Bekir Hakan Bakkal[2], Meral Sayın[3]

[1]Ankara Onkoloji Eğitim ve Araştırma Hastanesi, Radyasyon Onkolojisi, Ankara, Türkiye
[2]Zonguldak Karaelmas Üniversitesi, Radyasyon Onkolojisi, Zonguldak, Türkiye
[3]Ankara Eğitim ve Araştırma Hastanesi, Radyasyon Onkolojisi, Ankara, Türkiye

MASTEKTOMİ SONRASI GÖĞÜS DUVARI NÜKSÜ GELİŞEN DUKTAL KARSİNOMA İN SİTU VAKASI: OLGU SUNUMU

ÖZET

Duktal karsinoma in situ memenin preinvaziv bir lezyonudur. Tedavi seçenekleri arasında meme koruyucu cerrahiyi takiben uygulanan radyoterapi ve mastektomi bulunmaktadır. Mastektomi sonrası lokal-bölgesel kontrol oranı %96-100 arasında değişmektedir. Lokal nüks gelişen olgular radyoterapi ve/veya kemoterapi ile tedavi edilebilir. Duktal karsinoma in situ tanısıyla mastektomi ve aksiller diseksiyon uygulanan vakamız tamoxifen ile takip altındayken 4 yıl sonra gelişen lokal nüks nedeniyle kliniğimize başvurdu. Taramalarında uzak metastaz bulunmayan hastaya radyoterapi ardından kemoterapi uygulandı. Tedaviyi takiben hastanın lezyonları tamamen kayboldu. Tedavi sonrası takibe alınan hasta 46. ayında hastalıksız olarak izlenmektedir.

Anahtar sözcükler: duktal karsinoma in situ, nüks, radyoterapi, kemoterapi

ABSTRACT

Ductal carcinoma in situ is a preinvasive lesion in breast. Breast-conserving surgery followed by radiotherapy and mastectomy are the treatment options. Locoregional control rate is 96-100% after mastectomy. Patients with a local relapse can be treated by radiotherapy with or without chemotherapy. Our case who had a diagnosis of ductal carcinoma in situ was treated with mastectomy and axillary dissection followed by tamoxifen and 4 years after mastectomy she presented to our clinic with a local relapse. As the patient had no distant metastases, radiotherapy followed by chemotherapy was given. After treatment all the lesions disappeared. She is now well without any evidence of disease at 46th months' follow-up.

Keywords: ductal carcinoma in situ, relapse, radiotherapy, chemotherapy

Ductal carcinoma in situ (DCIS) is a pre-invasive lesion extending in a spectrum of atypical hyperplasia to invasive breast cancer in breast tissue. Although it was reported 1-5% of all breast cancers previously, it has increased to 15-20% with the widespread use of mammography especially in the last 20 years (1).

Treatment options have changed in recent years. While mastectomy was the preferred treatment method in the past, today breast-conserving surgery (BCS) followed by radiotherapy (RT) is preferred. Mastectomy may be chosen in cases of multicentric, diffuse, or large tumors where negative margin cannot be obtained, inability of patient to get RT, prior RT history, rejection of RT or pregnancy. Although some of the publications declare the superiority of local disease free survival with mastectomy over local excision followed by RT, others show that there is no significant difference between two modalities (2,3). Recurrence and 10-year survival rates after mastectomy are reported as 1-2% and 95%, respectively(2). Incomplete breast tissue resection, presence of hidden invasive tumor, size of tumor, nuclear grade, comedo type and presence of necrosis are reported as risk factors for local recurrence (4).

In this article we report a 48 years old female DCIS patient treated with mastectomy followed by tamoxifen who had a chest wall relapse 4 years after mastectomy.

Case report

Right breast mass of the patient was examined by biopsy and pathological examination revealed a comedo type DCIS. Mastectomy and axillary dissection was performed after biopsy in an external center and a comedo type DCIS in 9 cm diameter and 24 lymph nodes free from metastases were reported. After the operation she presented to our hospital. Paraffin blocks were examined again and revealed a high grade DCIS with positive estrogen and progesterone receptor (ER, PR). Tamoxifen 20 mg/d was begun in the follow-up period. Four years after mastectomy she returned with rash and a mass in 1 cm diameter on chest wall (Figure 1). Excisional biopsy was performed and the result was malignant epithelial tumor in 0.8*0.4*0.4 cm, ER (-), PR (-). Hemogram,

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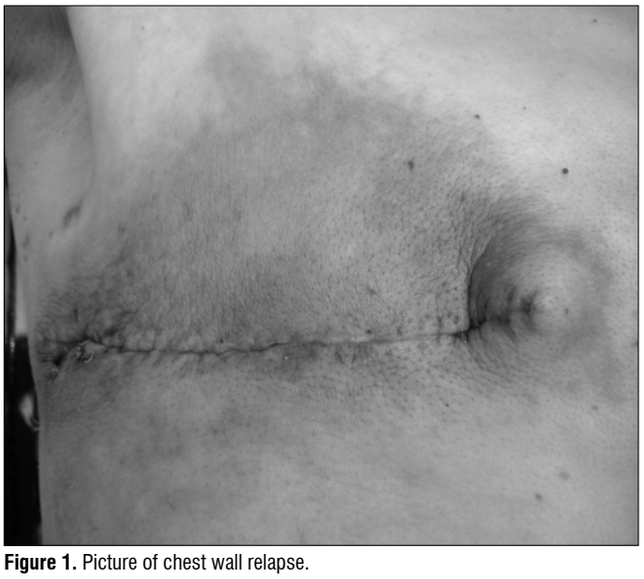

Figure 1. Picture of chest wall relapse.

biochemical examination, abdominal USG, chest X-ray and bone scintigraphy were normal. RT was planned for the patient with chest wall relapse after mastectomy. RT was administered with Co-60 to a dose of 56 Gy/28 days to the chest wall with tangential coplaner fields. After RT, Medical Oncology Department planned a systemic treatment. Four cycles of cyclophosphamide 500 mg/m^2/d, adriamycin 50 mg/m^2/d and fluorouracil 500 mg/m^2/d every 3 weeks. She is now free of disease without any serious complication 46 months after surgery.

Discussion

Ten years local control and survival rates of DCIS patients treated with mastectomy are 98-99% and 95%, respectively (2). Possible causes of recurrences are incomplete resection of breast with DCIS, presence of occult invasive focus, presence of implantation in residual breast during surgery. Many clinical, radiological, and pathological factors effecting local recurrence were investigated. It was found that comedo type, one of the recurrence factors, is characterized with high nuclear grade and diffuse necrosis.

Silverstein et al showed that comedo carcinoma was the most common and largest tumor (mean 2.9 cm), had the highest percentage of microinvasion (20%) and had the highest local recurrence rate when compared with other subtypes in their study (5). Also Patchefsky et al pointed out that comedo carcinoma was more aggressive (6). Bellamy et al suggested that comedo type of DCIS recurred more as invasive carcinoma than other high grade DCIS's (7).

High nuclear grade is also shown as a risk factor in local recurrence. In Kim and colleagues' serial with ten DCIS patients with chest wall relapse, four had high grade and six had intermediate grade, whereas none of them had low grade (8). Authors mentioned that eight of ten patients had positive or close surgical margin so it was suggested that inadequate margin was a negative prognostic factor. Cutuli et al reported that inefficient surgical resection was a significant risk factor in local recurrence in their study (9).

Tumor size is also a factor effecting local recurrence. Patients with tumors 2.5 cm or larger in extent have a higher probability of having occult invasive tumor or multicentric foci (10). Furthermore local recurrence rate is high in multiquadrant disease. In this situation insufficient surgery may be thought as a factor.

In our case risk factors for local recurrence like comedo subtype and high nuclear grade were present, and also tumor size was 9 cm. Some studies showed that whole breast tissue may not be excised with mastectomy (8). So residual breast tissue can contain occult intraepithelial disease and invasive cancer can grow up from this focus after mastectomy. At the same time tumor hold multi quadrant in our case, this situation also increases the probability of residual occult tumor after mastectomy.

It can be said that mastectomy may not cure DCIS completely with case reports and literature review. Especially multi-quadrant tumors, which have high probability of leaving residual normal breast tissue, and young patients should be followed closely.

A multidisciplinary approach is important in treatment after local recurrence. Primarily, if possible, excision of relapsed mass and chest wall radiotherapy must be administered. Afterwards depending on the hormonal receptor status systemic treatment with hormonetherapy or chemotherapy should be considered.

With the wide use of mammography screening, DCIS had become a more common type of breast tumor. Ten-year survival is over 95% when treated with mastectomy or BCS followed by RT. Attention must be paid to patients with poor prognostic factors and younger age patients who will have a long follow-up period after treatment.

References

1. Lenhard RE Jr. Cancer statistics: a mesure of progress. CA Cancer J Clin 1996; 46:3-4. (PMID: 8548524)
2. Silverstein MJ, Barth A, Poller DN, Gierson ED, Colburn WJ, Waisman JR, Gamagami P. Ten-year results comparing mastectomy to excision and radiation therapy for ductal carcinoma in situ of the breast. Eur J Cancer 1995;31:1425-1427. (PMID: 7577065)
3. Burstein HJ, Polyak K, Wong JS, Lester SC, Kaelin CM. Ductal carcinoma in situ of the breast. N Engl J Med 2004;350:1430-1441. (PMID: 15070793)
4. Wazer DE, Arthur DW. Breast: Stage Tis. In Edward C. Haperin, Carlos A. Perez, Luther W. Brady, ed. Princeples and practice of radiation oncology, 5th ed. Philadelphia 2008; 1164-1167.
5. Silverstein MJ, Waisman JR, Gamagami P, Gierson ED, Colburn WJ, Rosser RJ, Gordon PS, Lewinsky BS, Fingerhut A. Intraductal carcinoma of the breast (208 cases). Clinical factors influencing treatment choice. Cancer 1990;66:102-108. (PMID: 2162238)
6. Patchefsky AS, Schwartz GF, Finkelstein SD, Prestipino A, Sohn SE, Singer JS, Feiq SA. Heterogeneity of intraductal carcinoma of the breast. Cancer 1989; 63:731-741. (PMID: 2536585)
7. Bellamy CO, Mcdonald C, Salter DM, Chetty U, Anderson TJ. Noninvasive ductal carcinoma of the breast. Hum Pathol 1993; 24:16-23. (PMID: 8380275)
8. Kim JH, Tavassoli F, Haffty BG. Chest wall relapse after mastectomy for ductal carcinoma in situ: a report of 10 cases with a review of the literature. Cancer J 2006; 12:92-101. (PMID: 16630397)
9. Cutuli B, Teissier E, Piat JM, Janser JC, Renaud R, Rodier JF, Jung JM. Radical surgery and conservative treatment of ductal carcinoma in situ of the breast. Eur J Cancer 1992; 28:649-654. (PMID: 1317203)
10. Lagios MD, Westdahl PR, Margolin FR, Rose MR. Ductal carcinoma in situ. Relationship of extent of noninvasive disease to the frequency of occult invasion, multicentricity, lymph node metastases, and short-term treatment failures. Cancer 1982; 50:1309-1314. (PMID: 6286091)

Correspondence

Bekir Hakan Bakkal
Phone : +90(372) 261 26 06
E-mail : bhbakkal@yahoo.com