

INTRACYSTIC PAPILLARY CARCINOMA OF THE BREAST: REPORT OF 2 CASES

Case Report

MEMENİN İNTRAKİSTİK PAPİLLER KARSİNOMU : 2 OLGUNUN SUNUMU

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SUMMARY

This study reports two cases of intracystic papillary carcinoma of the breast. Both patients applied to our hospital with rapidly growing mass lesions. One patient had mastectomy and sentinel lymph node biopsy and the other had breast conserving surgery and sentinel lymph node biopsy. Both had the diagnosis of intracystic papillary carcinoma. One patient received no adjuvant therapy whereas the younger patient was recommended radiotherapy. Since these tumors are rarely seen, there is no evidence based guidelines for treatment. Tailored therapy is required in management of these patients.

Keywords: *Intracystic; papillary; carcinoma; breast.*

ÖZET

Bu yazıda intrakistik papiller meme karsinomu olan iki hasta sunulmaktadır. Her iki hasta da hastanemize memede hızlı büyüyen kitle nedeniyle başvurmuştur. Hastalardan birine mastektomi ve sentinel lenf nodu biyopsisi, diğerine ise meme koruyucu cerrahi ve sentinel lenf nodu biyopsisi yapılmıştır. İlk hasta adjuvan tedavi almazken, daha genç olan ikinci hastaya adjuvan radyoterapi önerilmiştir. Söz konusu tümörler çok nadir görüldükleri için, tedavilerinde kanıta dayalı kurallar mevcut değildir. Bu hastaların tedavisinin kişiye özel olarak planlanması gerekmektedir.

Anahtar sözcükler: *İntrakistik ; papiller; karsinom; meme.*

INTRODUCTION

Intracystic papillary carcinoma is a variant of intraductal papillary carcinoma and accounts for 0.5-1% of all breast carcinomas (1-3). This tumor can occur in pure form or it may be associated with ductal carcinoma in situ or invasive carcinoma (4). Clinical and radiological

manifestations are not specific. It typically occurs in older women and has an excellent prognosis with recurrence-free survival rate 96% and 77% at 2 and 10 years, respectively (3). Herein, we report two cases of intracystic papillary carcinoma and discuss the clinical picture by diagnosis and management.

CASE 1

A 57 year old woman presented with a giant mass in her right breast. Physical examination revealed a 15cm firm, nonpainful mass filling entire breast. Mammography revealed a large multilobulated mass lesion whereas ultrasonography showed a well-circumscribed multiloculated cyst with solid intramural component. The patient underwent mastectomy with sentinel lymph node biopsy. Macroscopic appearance was a well defined mass containing bloody cystic fluid with fibrin (Figure 1).



Figure 1. Macroscopic appearance of intracystic carcinoma in case 1.

Definitive pathology was intracystic papillary carcinoma (Figure 2).

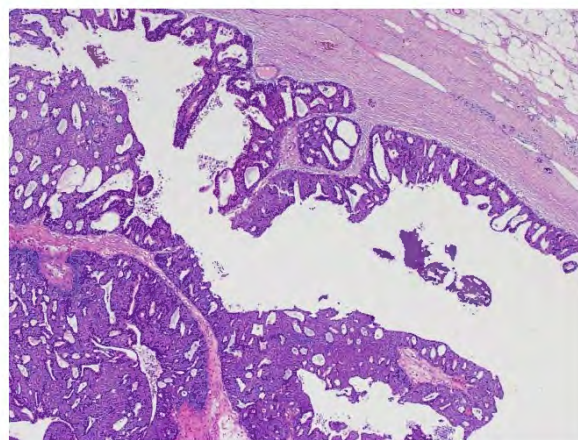


Figure 2. Microscopic appearance of the same tumor (H.E. x40) .

Tumor size was 11.5cm. No lymph node metastasis was identified in SLN biopsy. The tumor was positive for estrogen and progesterone receptors but negative for Her-2/neu antigen. The patient received no adjuvant therapy. She has been followed up for two years and neither recurrence nor metastasis has been diagnosed.

CASE 2

A 45 year old female applied to the hospital with a rapidly growing mass in her left breast. Physical examination revealed a 4cm firm, painless mass without visible skin changes. Mammography showed multiple nodular opacities in both breasts. The largest lesion was measured 27x21mm and 42x30 mm in the right and left breast, respectively. Breast MRI showed a 36x30mm mass lesion with irregular borders showing early wash-out of contrast material. Axillary lymph nodes were suspicious for metastasis on MRI images. Segmental mastectomy and sentinel lymph node biopsy was performed. SLN was found to be negative for tumor cells. Definitive pathology was intracystic papillary carcinoma with 3.5cm size. The tumor was positive for estrogen and progesterone receptors but negative for Her-2/neu antigen. The patient received adjuvant radiotherapy. She has been followed up for 9 months and no

evidence of recurrence or metastasis has been seen.

DISCUSSION

Intracystic papillary carcinoma of the breast is a rare malignant tumor which is most frequently seen in post menopausal women in the 5th and 6th decades (5). It is also described in male population (5). It can present with mass or bloody nipple discharge (6). In some cases it may be found in screening mammography.

On mammograms it appears as round, ovular or lobulated opacities (3,5). The borders are usually distinct but the margins may be obscured if invasion or inflammation is present. On ultrasonography, the borders may be irregular or microlobulation may be seen. The mass is often complex in echo texture with cystic and solid components (7). Internal echoes may be identified which are usually related to spontaneous hemorrhage within the cyst. MRI is sensitive but not specific for these tumors (8). It is useful in detection of papillomatosis.

The size of the lesion, presence of intracystic vegetations, heterogeneous echo texture and irregular borders are important features associated with suspicion of malignancy (7). Core needle biopsy has been used to detect malignancy preoperatively but it has limitations to discriminate between in situ or invasive papillary carcinoma. Invasion usually found at the periphery of the tumor (9). Surgical excision is required for detailed evaluation of whole specimen to conclude definitive diagnosis. Identification of myoepithelial layers for presence of invasion is important for classification of the papillary lesion (9). Intracystic papillary carcinoma is a low grade encapsulated carcinoma which has been regarded as a borderline lesion between in situ and invasive carcinoma. Since it is a rarely seen tumor, there are no evidence based guidelines for management. However, many case

reports and retrospective studies have shown excellent prognosis with conservative surgery without axillary dissection in intracystic papillary carcinoma patients with no evidence of invasive component (3,5,9).

Sentinel lymph node biopsy may be a good alternative to axillary dissection in patients with invasive component. Both of our patients were operated without attempt to preoperative diagnosis with core needle biopsy. Frozen section was performed preoperatively and sentinel lymph node biopsy was performed in addition to segmental mastectomy and simple mastectomy. Both patients were negative for SLN metastasis.

The role of adjuvant therapy is also unclear (3,5). Biologically aggressive tumors, young patients (<40 years old), lesions with invasive component especially when associated with axillary metastases have been recommended to receive adjuvant therapy (9,10). The therapy can be radiotherapy and/or chemotherapy with or without hormonal therapy according to the receptor status. Postoperative follow up is recommended although metastasis is uncommon. In the second patient adjuvant radiotherapy was scheduled because of breast conserving surgery and high proliferative index of the tumor because in cases with a large amount of nuclear atypia, the prognosis may be less optimistic (10).

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