

## Breast Cancer in Erzincan Region: Retrospective Analysis of Cases Which Diagnosed in Last Five Years

Ferda KESKİN ÇİMEN<sup>1</sup>, Orhan ÇİMEN<sup>2</sup>, Eray KURNAZ<sup>2\*</sup>

1. Erzincan Binali Yıldırım University, Faculty of Medicine, Department of Pathology, Erzincan, Turkey  
2. Erzincan Binali Yıldırım University, Faculty of Medicine, Department of General Surgery, Erzincan, Turkey

Geliş / Received: 14/03/2021, Kabul / Accepted: 26/03/2021

### Abstract

Breast cancer is the most common cancer in women today. Forty-one patients who underwent surgery for breast cancer between January 2016 and December 2020 at our hospital were included in the study. The mean age of the patients was 58,7 (30-84). Modified radical mastectomy was performed in 28 patients (68,2%). Nine patients (21,9%) underwent breast conserving surgery. In five of these patients, axillary dissection was added as sentinel lymph node sampling was positive. Simple mastectomy was performed in four patients (9,9%). The most common result after postoperative histopathological evaluation was invasive ductal carcinoma (73,1%). Both in the world and in our country, breast cancer is also rapidly becoming a trend for minimally invasive surgery. However, in order to perform breast conserving surgery and eliminate the need for axillary dissection, the patient should be diagnosed at an early stage. The patient should be approached as multidisciplinary. Early diagnosis increases treatment success and life expectancy. Early diagnosis enables that surgical treatment to be performed under more minimally invasive conditions.

**Keywords:** breast cancer, early diagnosis, treatment, axillary dissection

### Erzincan Yöresinde Meme Kanseri: Son Beş Yılda Tanı Alan Olguların Retrospektif Analizi

#### Öz

Meme kanseri günümüzde kadınlarda en yaygın görülen kanser türüdür. Hastanemizde Ocak 2016-Aralık 2020 arasında meme kanseri nedeniyle ameliyat edilen 41 hasta çalışmaya dahil edildi. Hastaların yaş ortalaması 58,7 (30-84) idi. 28 hastaya (% 68,2) modifiye radikal mastektomi yapıldı. Dokuz hastaya (% 21,9) meme koruyucu cerrahi uygulandı. Bu hastalardan beşine, sentinel lenf nodu örnekleme pozitif olması üzerine, aksiller diseksiyon da eklendi. Sentinel lenf nodu örnekleme negatif olan ve meme koruyucu cerrahi için uygun özellikte olmayan dört hastaya (% 9,9) basit mastektomi uygulandı. Postoperatif histopatolojik değerlendirme sonrası en sık karşılaşılan sonuç invaziv duktal karsinom idi (% 73,1) Hem dünya genelinde hem de ülkemizde, diğer kanser türlerinde olduğu gibi, meme kanserinde de hızla minimal invaziv cerrahiye eğilim olduğu görülmektedir. Ancak meme koruyucu cerrahinin uygulanabilmesi ve aksiller diseksiyon ihtiyacının ortadan kalkması için hastanın erken evrede tanı alması gerekmektedir. Tanı konulduktan sonra ise hastaya multidisipliner olarak yaklaşılmalıdır. Erken tanı sayesinde tedavi başarısı ve beklenen yaşam süresi artmaktadır. Ayrıca erken tanı cerrahi tedavinin daha minimal invaziv şartlarda uygulanmasını sağlamaktadır.

**Anahtar kelimeler:** meme kanseri, erken tanı, tedavi, aksiller diseksiyon

### 1. Introduction

Breast cancer is the most common malignancy in women today (Benson et al., 2012). Every year 1,7 million women are

diagnosed as breast cancer worldwide (Ferlay et al., 2015). Every one of eight women carries the risk of developing breast cancer in their lifetime. It has been stated that with the proper use of screening methods, deaths related to breast cancer can be reduced by up to 21%. The most important risk factors for breast cancer are female gender, family history, age, early menarche and late menopause (Selçuk et al., 2005).

## 2. Material and Methods

Fourty-one patients who underwent surgery for breast cancer in our hospital between January 2016 and December 2020 were included in the study. All patients were female. Patient data were evaluated retrospectively. Patients' age, imaging findings, preoperative biopsy results, surgical method and postoperative histopathological evaluation reports were recorded.

## 3. Results and Discussion

The study was conducted on 41 patients with a mean age of 58,7 (30-84). In 39 (92.8%) of the patients included in the study, the first reason for admission to the hospital was the detection of a painless mass in the breast. Three patients (7,2%) were diagnosed after observing suspicious lesions on screening mammography.

In the preoperative mammography results; the findings were BIRADS 5 in 24 patients

(58,5%), BIRADS 4 in 10 patients (24,3%), BIRADS 3 in two patients (4,9%), and BIRADS 0 in five patients (12,3%). Modified radical mastectomy was performed in 28 patients (68,2%). Breast conserving surgery was performed in nine patients (21,9%). Axillary dissection was added to five of these patients because of positive sentinel lymph node sampling. Simple mastectomy was performed in four patients (9,9%) whose sentinel lymph node sampling was negative and unsuitable for breast conserving surgery. The most common result after postoperative histopathological evaluation was invasive ductal carcinoma (73,1%).

Breast cancer is the most common cancer of the female gender, with a rate of 24,1%. It ranks second in the frequency of causing death (Stewart et al., 2004). Despite the decreases in breast cancer mortality in the last two decades, the incidence of this disease is increasing (Benson et al., 2012). The reasons for the decrease in mortality rates are thought to be the use of mammography as a screening method and the improvements in treatment (Jemal et al., 2010).

The incidence of breast cancer in our country is between 50/100000 and 20/100000 depending on geographical location (Ozmen 2008). Because of this prevalence, the diagnosis and treatment of breast cancer gains importance.

Breast cancer is a disease in which multifactorial conditions may be a component of its etiology. Uncontrolled cell proliferation due to breast cancer often exhibits changes such as signs of genomic instability and the disappearance of certain epithelial features. Therefore, it is important to know the molecular mechanisms that cause cancer development and to determine the most appropriate treatment methods. The general purpose of breast cancer research is to determine prognostic and predictive changes (Erdamar et al., 2001).

It has been stated that the most important independent risk factor in breast cancer is the age of the patient. The incidence of breast cancer increases with age. The incidence graph shows a steep rise with a two-fold increase during each decade before menopause. The graph is flat at the age of fifty and continues to rise afterwards. This rise in the graph is significantly affected by ovarian activity. Breast malignancies are more common in the postmenopausal period (Ilvan 2006). Majority of the patients which diagnosed with breast cancer are over the age of 40. Spatt et al. (1995) had shown that the number of patients with breast cancer between the ages of 40 and 70 constituted 67,5% of all cases. Breast cancer is less common in premenopausal women (Dalay 2003).

One of the important factors in breast cancer follow-up is the histopathological character of the tumor. Breast cancer is evaluated in two groups histopathologically as invasive and in situ carcinoma. The most common subgroup in invasive carcinomas is invasive ductal carcinoma (75--80%). Other possible subgroups are; invasive lobular (5--15%), tubular (2%), mucinous (1--6%), medullary (1--2%) carcinomas and tumors with mixed characteristics which are very rare compared to others (Zografos et al., 2004). Similar results were obtained in our study. 73,1% of the cases were reported as invasive ductal carcinoma.

It is difficult to determine the risk of breast cancer in women, and most of the risk factors can not be modified. In order to reduce the risk of breast cancer, people may be advised to make positive changes in their lifestyle. Thanks to screening mammograms, a significant risk reduction may not occur in high risk women, but it has been observed that deaths due to breast cancer have been reduced (Kankaya et al., 2019).

#### **4. Conclusion**

Similar to different cancers both in the world and in our country, it is observed that there is a rapid trend towards minimally invasive surgery in the treatment of breast cancer. However, in order for breast conserving surgery to be performed and the need for

axillary dissection to be eliminated, the patient should be diagnosed at an early stage. After the diagnosis is made, the patient should be approached multidisciplinary. Thanks to early diagnosis, treatment success and life expectancy increase. In addition, early diagnosis provides the application of surgical treatment in more minimally invasive conditions.

## 5. Acknowledgement

This study was approved by the Erzincan Binali Yıldırım University Clinical Research Ethics Committee meeting dated 28.01.2021, with the decision numbered 03/01.

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