INTRODUCTION

Breast cancer is the most common cancer in women. However, with early diagnoses and powerful treatments, mortality rates have decreased compared with the past. Hormonal conditions such as early menarche, advanced maternal age or not giving birth, in vitro fertilization treatments, and stressful metropolitan city life, which we frequently encounter today, have increased the incidence of breast cancer and decreased the age of occurrence. In this case report, a patient who was diagnosed with bilateral breast cancer at the age of 27 years was evaluated together with all clinical, radiological, pathological, and operative features. It was aimed to emphasize that breast screening should be performed in cases with a family history, even at a young age and asymptotically.

CASE REPORT

A 27-year-old just married and nulliparous female patient presented to our hospital with a painless mass in her right breast, which she noticed 2 weeks ago on her honeymoon. Physical examination revealed immobile, asymmetrical mild stiffness in the upper outer quadrant of the right breast. There were no other examination findings in the left breast and both axilla. The patient, whose menstruation was regular, had no history of using combined oral...
contraceptives or other hormonal drugs. Breast ultrasonography was performed with suspicion of malignancy in the patient, whose sister had been diagnosed with breast cancer and her mother with ovarian cancer previously. On breast ultrasonography, an iso-hypoechoic mass lesion with indistinct-irregular circumscribed, lobulated contours, heterogeneous internal structure with central cystic-degeneration areas in the upper outer quadrant of the right breast 20×16 mm in diameter, internal and peripheral intense blood supply, and accompanying small lesions were detected. In the elastographic evaluation, hard color coding was observed (BIRADS 4c) (Fig. 1). Lesions revealed type 2–3 kinetics in dynamic breast magnetic resonance imaging (MRI), heterogeneous enhancement, and diffusion restriction in favor of malignancy (Fig. 2). After histopathological and immunohistochemical examination, lesions in both breasts were evaluated as high grade (nuclear grade 3), high proliferation rate (Ki-67: 55%) triple-negative invasive ductal carcinoma. Neoadjuvant chemotherapy treatment was given to the patient before the operation. The patient was applied bilateral skin and nipple-sparing total mastectomy and bilateral subpectoral silicone implant in the same session at the request of the patient. Due to high-dose chemotherapy, the patient entered ovarian failure and could not conceive.

DISCUSSION

Cases with breast cancer at a young age are usually diagnosed late and when they are diagnosed, they are usually at an advanced stage.\textsuperscript{[4]} In addition, conditions such as pregnancy and breastfeeding at young ages are also important factors that cause a delay in the diagnosis of malignant masses in the breast. Apart from this, breast cancers that occur at a young age tend to be more aggressive.\textsuperscript{[4–6]}

Bilateral breast cancer is usually seen in patients with a family history, lobular histology, or in the high-risk group for breast cancer.\textsuperscript{[7]} Considering the lobular histopathological type is generally asymptomatic, younger women in the high-risk groups should be included in radiological screening programs. With the triple test consisting of palpation, ultrasound, and biopsy, it is possible to achieve high diagnostic accuracy in the diagnosis of breast cancer in women under the age of 30 years.\textsuperscript{[4]} In cases under 40 years of age, the diagnostic performance of the examination decreases due to the density of the breast parenchyma, and mammographic examinations are not recommended due to radiation exposure. In cases with suspected malignancy and cannot be determined by ultrasonography, contrast-enhanced dynamic breast MRI can often be a good option before the biopsy.

CONCLUSION

As a result, although bilateral palpable lesions in the breast are usually benign in young female patients in the reproductive age, the possibility of malignancy should be considered in cases with a high risk of breast cancer, even at a very young age. Particularly, patients with a family history of breast cancer in their first-degree relatives or with high risk should be included in clinical and radiological screening programs from a young age. Thanks to screening programs, it will be promising to diagnose these cases when they are at a much earlier stage before applying to the
hospital with palpable lesion complaints and to be given the chance of early treatment in terms of surveillance and cosmetic results.

Disclosures

Informed Consent: The participant has consented to the submission of the case report to the journal.

Conflict of Interest: The authors declare that there is no conflict of interest.

Peer-review: Externally peer-reviewed.

Financial Disclosure: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.


REFERENCES