Bagcilar Med Bull DOI: 10.4274/BMB.galenos.2023.2024-03-027



Surgical Treatment in Young Breast Cancer Patients is Challenging

Genç Meme Kanseri Hastalarının Cerrahi Tedavisinde Karşılaşılan Zorluklar

Dihan Turhan

University of Health Sciences Turkey, Sancaktepe Şehit Prof. Dr. İlhan Varank Training and Research Hospital, Clinic of General Surgery, İstanbul, Turkey

Dear Editor,

Breast cancer is the most common cancer in women (1). As the proportion of breast cancer among young women (aged \leq 40 years) incidence is increased up to 11% of new cases, the importance of young breast cancers is increasing (1,2).

Young breast cancer patients are mostly diagnosed late due to low mammographic sensitivity and absence of radiological breast cancer screening programs. The previous studies showed that the majority of young breast cancer patients had ductal histology (86.5%) and grade III (58.9%) tumors. Node-positive disease were observed in 50.2%, multifocality was around 27%. One third of tumors were estrogen receptor negative and one quarter was HER2 positive. They present more frequently (34.3%) with high basal-like tumors compared with older patients (20%) (3). They have higher risk of breast cancer predisposing gene mutations like *BRCA1*, *BRCA2*, *TP53*, *PALB2*, *PTEN*, *CHEK2*, *ATM*, etc. (2). As a result, breast cancer specific survival rates are lower and breast cancer recurrence risk is higher in this age group (2).

Surgery in young breast cancer patients is challenging. These patients mostly have doubts in surgical choice between mastectomy and breast conservation surgery (BCS) (4). The increased risk of death and recurrence rates direct surgeons and patients to choice more radical surgical treatments. Sun et al. (5) showed that according to surveillance, epidemiology, and end results database, by the end of the 20th century, the proportion of BCS had grown from nearly 35% to approximately 60%. However, in the 21st century, BCS gradually fell to 35% again (5). This BCS rate decrease is mostly due to increased rates of mastectomies and prophylactic mastectomies in young patients. After mastectomy young patients may face many psychosocial problems in body image, sexuality, job and fertility issues (6,7). After cancer surgery they seek reconstructive surgeries and rate of reconstruction with prothesis is increasing. This process bring out disadvantages such as loss of sensation, risk of repeat surgeries for cosmesis, increased costs, loss of ability to breast-feeding (7).

Although mastectomy surgeries supported by reconstructive techniques are increasing today, I would like to draw attention to the literature data, especially in early stage young breast cancer patients. For early stages, data from current reviews and meta-analyses showed that, breast conserving surgery provides similar overall survival rates compared to mastectomy for young breast cancer patients (5,8,9). With modern multidisciplinary management approaches, prognosis is better in young breast cancer patients nowadays (10). Considering these

Address for Correspondence: Nihan Turhan, University of Health Sciences Turkey, Sancaktepe Şehit Prof. Dr. İlhan Varank Training and Research Hospital, Clinic of General Surgery, İstanbul, Turkey

E-mail: drnihanturhan@yahoo.com ORCID: orcid.org/0000-0002-8672-3853 Received: 18.03.2024 Accepted: 18.05.2024

Cite this article as: Turhan N. Surgical Treatment in Young Breast Cancer Patients is Challenging. Bagcilar Med Bull

°Copyright 2024 by the Health Sciences University Turkey, İstanbul Bagcilar Training and Research Hospital. Bagcilar Medical Bulletin published by Galenos Publishing House. Licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 (CC BY-NC-ND) International License. factors, radical surgical approaches in selected patient groups may be unnecessary. It should be kept in mind that, oncoplastic techniques can be applied among BCS options and better cosmetic results can be achieved even in large tumors. Reducing the diameter of the mass with neoadjuvant chemotherapy is also an effective method to achieve good cosmetic results.

A very meticulous individualized approach including cancer biology, tumor stage, genetic mutations, psychosocial effects and cost effectiveness is very important for choosing surgical treatment for young breast cancer patients.

Keywords: Breast cancer, surgery, young patient

Anahtar kelimeler: Cerrahi tedavi, genç hasta, meme kanseri

Ethics

Financial Disclosure: The author declared that this study received no financial support.

References

- DeSantis CE, Ma J, Gaudet MM, Newman LA, Miller KD, Goding Sauer A, et al. Breast cancer statistics, 2019. CA Cancer J Clin 2019;69(6):438-451.
- 2. Rossi L, Mazzara C, Pagani O. Diagnosis and Treatment of Breast Cancer in Young Women. Curr Treat Options Oncol 2019;20(12):86.

- 3. Azim HA Jr, Partridge AH. Biology of breast cancer in young women. Breast Cancer Res 2014;16(4):427.
- 4. Recio-Saucedo A, Gerty S, Foster C, Eccles D, Cutress RI. Information requirements of young women with breast cancer treated with mastectomy or breast conserving surgery: A systematic review. Breast 2016;25:1-13.
- Sun ZH, Chen C, Kuang XW, Song JL, Sun SR, Wang WX. Breast surgery for young women with early-stage breast cancer: Mastectomy or breast-conserving therapy? Medicine (Baltimore). 2021;100(18):e25880.
- 6. Mokhtari-Hessari P, Montazeri A. Health-related quality of life in breast cancer patients: review of reviews from 2008 to 2018. Health Qual Life Outcomes 2020;18(1):338. Erratum in: Health Qual Life Outcomes 2022;20(1):35.
- Rosenberg SM, Dominici LS, Gelber S, Poorvu PD, Ruddy KJ, Wong JS, et al. Association of Breast Cancer Surgery With Quality of Life and Psychosocial Well-being in Young Breast Cancer Survivors. JAMA Surg 2020;155(11):1035-1042.
- 8. Vila J, Gandini S, Gentilini O. Overall survival according to type of surgery in young (≤40 years) early breast cancer patients: A systematic meta-analysis comparing breast-conserving surgery versus mastectomy. Breast 2015;24(3):175-181.
- Lazow SP, Riba L, Alapati A, James TA. Comparison of breastconserving therapy vs mastectomy in women under age 40: National trends and potential survival implications. Breast J 2019;25(4):578-584.
- El Saghir NS, Khalil LE, El Dick J, Atwani RW, Safi N, Charafeddine M, et al. Improved Survival of Young Patients With Breast Cancer 40 Years and Younger at Diagnosis. JCO Glob Oncol 2023;9:e2200354.