VIA MEDICA

Pictures in Oncology

NOWOTWORY Journal of Oncology
2025, volume 75, number 1, 46
DOI: 10.5603/njo.102051

ISSN: 0029–540X, e-ISSN: 2300–2115
www.nowotwory.edu.pl

Breast cancer 3 years after a contralateral risk reduction mastectomy

Wojciech Figurny, Maciej Łukaszek, Mateusz Wichtowski

Univeristy Hospital in Poznan, Poland

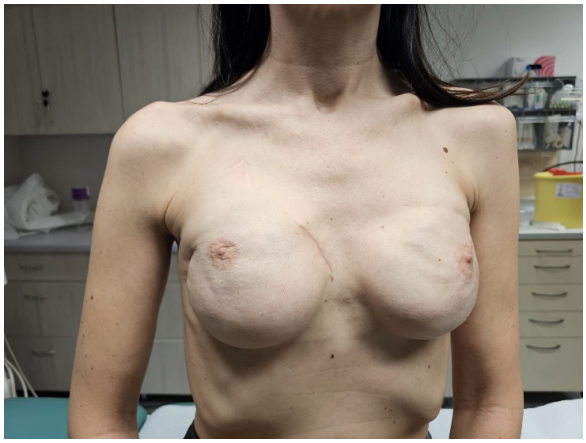

Figure 1. Operation

A 37-year old BRCA1-positive woman was diagnosed during follow-up with a subsequent contra-lateral breast cancer 3 years after undergoing treatment for left-sided breast cancer T2N0M0 [no special type (NST) with 30% estrogen receptor (ER); 0% progesterone receptor (PgR); human epidermal growth factor receptor 2 (HER-2) negative; Ki-67 of 70%]. The previous treatment was neoadjuvant chemotherapy followed by a 2-stage bilateral nipple-sparing mastectomy with subpectoral reconstruction with additional lower pole coverage with the use of a mesh, left sentinel node biopsy, with adjuvant endocrine therapy.

The secondary lesion was diagnosed during follow-up. The tumor location was the upper-inner quadrant of the right breast in the residual-glandular tissue, with no involvement of the pectoralis muscle in the magnetic resonance imaging (MRI). A core needle biopsy was performed resulting in a cancer diagnosis — NST, grade 3, now with a profile of 85% ER; PgR < 1%; HER-2 negative; Ki-67 of 80%.

The surgical approach was to perform a wide local excision of the tumor with a sentinel lymph node biopsy. Due to the tumor location above the pectoralis muscle, enough margin of healthy tissue was present to not damage the breast implant or its capsule. Final staging for the right-side breast cancer was pT1cpN0M0, with an acceptable cosmetic outcome (Fig. 1). Subsequent treatment was radiotherapy and further endocrine therapy.

Residual glandular tissue is identified in 6–76.2% of breasts after mastectomy [1]. Based on the literature, the risk of developing breast cancer after risk-reduction mastectomy is low — in the cohort cited below [2] there was no breast cancer case in the risk-reduction mastectomy arm of the study, yet the authors point out a median follow-up of 3 years.

This case shows the need for a careful follow-up after mastectomy with annual MRI screening in high-risk patients with a thorough examination of the residual glandular tissue.

References

1. Dietzel F, Kolberg L, Vesper AS, et al. Factors Influencing Residual Glandular Breast Tissue after Risk-Reducing Mastectomy in Genetically Predisposed Individuals Detected by MRI Mammography. Cancers (Basel). 2023; 15(3), doi: 10.3390/cancers15030829, indexed in Pubmed: 36765786.
2. Jakub JW, Peled AW, Gray RJ, et al. Oncologic Safety of Prophylactic Nipple-Sparing Mastectomy in a Population With BRCA Mutations: A Multi-institutional Study. JAMA Surg. 2018; 153(2): 123–129, doi: 10.1001/jamasurg.2017.3422, indexed in Pubmed: 28903167.

How to cite:
Figurny W, Łukaszek M, Wichtowski M. ***Breast cancer 3 years after a contralateral risk reduction mastectomy***. *NOWOTWORY J Oncol* 2025; 75: 46.