

VIEWPOINT

Immediate Breast Reconstruction for All?

Galia Jacobson, MD *†; Tal Shapira-Rotenberg, MD †; Shira Galper, MD *†; Einav Gal Yam, MD †; Douglas Zippel, MD ‡§; Miri Sklair-Levy, MD §; Bella Kaufman, MD †; Orit Kaidar-Person, MD *†

Sir,

he rates of mastectomy and immediate breast reconstruction (IBR) are increasing.1 Cosmetic outcomes are probably an important factor driving these trends, but the surgical procedure has also become less prone to morbidity with increased experience.² IBR fulfills the patients' desire for a reconstructed breast and the surgeons' wish to perform a successful single-stage procedure.² Nevertheless, these operations should be planned with the patient's cancer diagnosis in mind, and not all patients are suitable for IBR, skin-sparing mastectomy, and/or nipple-sparing mastectomy (NSM). Figure 1 shows a magnetic resonance image of early postoperative recurrence after implant-based IBR. A 40-year-old patient presented with cT2 multicentric left invasive ductal carcinoma (7 tumor foci, between 7 and 32 mm, per magnetic resonance image), grade 3, triple negative disease, and cN1, including a tumor focus underneath the breast skin, without skin involvement (Fig. 1A). She was treated with preoperative chemotherapy, leading to only partial response per imaging. She underwent NSM and axillary dissection and IBR at a different institution. The final pathologic finding was positive for extensive multicentric

disease in the breast, ypT1 (7 foci, largest 10mm) with free margins, lymphovascular invasion, and tumor thrombi around the masses. Axillary residual disease included 2 out of the 8 positive lymph nodes. After surgery, the patient suffered from a wound infection and needed prolonged antibiotic treatment. She subsequently underwent additional surgery due to wound complications. Two months after the surgery, she was referred to our center to continue oncologic treatment, including postmastectomy irradiation. She suffered from painful palpable masses within the reconstructed breast and was referred for a biopsy, which confirmed loco-regional recurrence at multiple sites (Fig. 1B).

There are many issues to discuss in this specific case, but we would like to highlight the main concern that led to this letter. This patient had triple-negative disease and responded poorly to a full course of preoperative systemic therapy. Such patients have a higher rate of local recurrence and early systemic failure and tend to recur early within 2 years from primary surgery. Skin-sparing mastectomy and NSM are considered oncologically safe procedures based on retrospective studies, and both procedures tend to leave a larger amount of residual breast tissue (at least 5 mm of



Fig. 1. Breast magnetic resonance image (MRI). A, Preoperative MRI showing a foci adjacent to the skin but not involving it. B, Local subcutaneous early recurrence after an implant-based reconstruction.

From *Radiation Oncology, †Oncology Institute, ‡Department of Surgery C and Surgical Oncology, and §Meirav Breast Health Center, Chaim Sheba Medical Center, Tel Hashomer, Israel. Received for publication March 5, 2020; accepted March 17, 2020. Copyright © 2020 The Authors. Published by Wolters Kluwer Health, Inc. on behalf of The American Society of Plastic Surgeons. This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-No Derivatives License 4.0 (CCBY-NC-ND), where it is permissible to download and share the work provided it is properly cited. The work cannot be changed in any way or used commercially without permission from the journal.

Plast Reconstr Surg Glob Open 2020;8:e2822; doi: 10.1097/ GOX.00000000002822; Published online 22 May 2020.) subcutaneous tissue) after mastectomy to allow for IBR,³ and in this specific case, a possible unnoted residual tumor foci.⁴ Importantly, current evidence suggests that these patients may benefit from additional postoperative therapy (postmastectomy irradiation, systemic therapy), and IBR might interfere with postoperative treatment.⁵ Therefore, this patient should have been referred for modified total mastectomy without IBR to allow for complete glandular tissue removal and for immediate postoperative oncologic treatment. More studies are needed to identify the patients who are not suitable for IBR and skin-sparing with or without nipple-sparing procedures. In the meantime, the possibility of residual breast tissue after these procedures should be kept in mind and fully discussed with the patient.

Orit Kaidar-Person, MD

Breast Radiation Unit, Radiation Oncology Sheba Tel Háshomer Ramat Gan, Israel E-mail: orit.kaidarperson@sheba.health.gov.il

DISCLOSURE

The authors have no financial interest to declare in relation to the content of this article.

REFERENCES

- Kummerow KL, Du L, Penson DF, et al. Nationwide trends in mastectomy for early-stage breast cancer. JAMA Surg. 2015;150:9–16.
- Kaidar-Person O, Jones EL, Zagar TM. Team work: mastectomy, reconstruction, and radiation. *Plast Reconstr Surg Glob Open*. 2017;5:e1385.
- Papassotiropoulos B, Güth U, Chiesa F, et al. Prospective evaluation of residual breast tissue after skin- or nipple-sparing mastectomy: results of the SKINI-trial. Ann Surg Oncol. 2019;26:1254–1262.
- Holland R, Veling SH, Mravunac M, et al. Histologic multifocality of Tis, T1-2 breast carcinomas. Implications for clinical trials of breast-conserving surgery. *Cancer.* 1985;56:979–990.
- Masuda N, Lee SJ, Ohtani S, et al. Adjuvant capecitabine for breast cancer after preoperative chemotherapy. N Engl J Med. 2017;376:2147–2159.