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sion. This typically has occurred following exchange of the tissue expander for a permanent implant. This exchange was usually performed 6 months after radiation therapy and involved reentry into the implant space by means of the preexisting incision. Explanations for incisional dehiscence include damage to the subdermal microvasculature, atrophy of the subcutaneous fat, and thinning of the dermal elements. Thus, it was a mechanical issue, not infectious. Maneuvers such as decreasing implant volume or using devices that are not high profile have been minimally effective.

Two modifications related to technique and timing have demonstrated efficacy to minimize the incidence of incisional dehiscence. The first was to create a lateral inframammary counterincision and the second was to perform the exchange between 6 and 12 weeks after radiotherapy. Although the inframammary region is within the zone of irradiation, the degree of tissue atrophy is minimal in that area, and a durable three- to four-layer repair is possible. In discussions with colleagues and radiation oncologists, the consensus is that the exchange should occur during the subacute phase of radiation injury that typically occurs between 6 and 12 weeks.

As we continue our quest to improve patient outcomes, studies such as these are important. Time and experience may demonstrate that it is best to perform the exchange of devices before radiation therapy rather than after or that it may not matter. The standard by which good to excellent outcomes are defined is based on the predictability and reproducibility of a given technique. DOI: 10.1097/PRS.0b013e31823aef9f

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Patient Satisfaction in Unilateral and Bilateral Breast Reconstruction

Sir: We read with great interest the article by Craft et al. entitled "Patient Satisfaction in Unilateral and Bilateral Breast Reconstruction,"¹ and we would like to congratulate the authors on their newsworthy study.

Even if autologous breast reconstruction techniques are generally considered to be the more suitable, and



Fig. 1. Implant breast reconstruction after nipple-sparing mastectomy. The patient had a small contralateral breast which she desired to enlarge. Augmentation mammaplasty was performed on the healthy breast.

the lower abdominal tissue is the preferred donor site for microsurgical autologous reconstruction, we would like to take the opportunity to further discuss how to improve patient satisfaction in implant-based reconstruction.

Unfortunately autologous breast reconstruction may not be feasible in certain patients, such as women with low body mass index or patients with insufficient abdominal soft tissue to perform a suitable reconstruction with a deep inferior epigastric perforator or transverse rectus abdominis musculocutaneous flap. In addition, some women may not be willing to accept the donorsite morbidity, long operative time, and prolonged hospitalization and recovery. The presence of some comorbidities may also limit reconstructive options.

It is especially in this set of patients that we need to achieve a better result with implants. Breast reconstruction aims to restore not only volume but also shape and contour. Establishment of the upper breast border and superior mammary slope, creation of adequate projection and ptosis, and reconstitution of the inframam-



Fig. 2. A patient with previous wide local excision on the right breast underwent skin-sparing mastectomy and two-stage breast reconstruction with extraprojection implant and contralateral mastopexy. She refused nipple-areola complex reconstruction.

mary fold are critical aspects of the reconstructive technique. The newer biodimensional prostheses have helped us to achieve better projection and ptosis,² and there are many techniques to restore the inframammary fold.³ Single- and two-stage implant breast reconstructions are safe and easy operations for skilled surgeons. Anatomical, extraprojection implants, introduced by the most advanced manufacturers, significantly enhance cosmetic results and reduce the indication for autologous flaps.

In our experience, we try to reconstruct for all women a bilateral, cosmetic, medium-sized breast, between 350 and 500 cc, highly projected, with small to moderate ptosis. As it is often difficult to reach symmetry in shape with a unilateral implant-based reconstruction, contralateral breast reshaping is mandatory to improve patient satisfaction.

We are used to offering patients with very small breasts a contralateral augmentation mammaplasty (Fig. 1); for small to medium-sized breasts, we offer contralateral augmentation with or without periareolar mastopexy; and in medium to large breasts, a mastopexy or reduction mammaplasty is offered to improve shape and symmetry (Fig. 2).

Contralateral reshaping is generally proposed at the first consultation, when reconstructive options and methods are illustrated and explained to the patients. If this option is accepted, the appropriate implant device can be chosen.

Contralateral breast improvement is usually well accepted by patients, who can improve a too small or ptotic or large breast. It is also, from a psychological point of view, a sort of victory for patients against the cancer that took their breast and femininity, and this can further improve their body image and satisfaction after implant breast reconstruction.

Extraprojection implants, coupled with contralateral adjustment, extend the indication of implant-based reconstructions virtually to all women, irrespective of breast size and shape. They provide a good aesthetic outcome and avoid the use of autologous flaps on the basis of breast size and shape. DOI: 10.1097/PRS.0b013e318230be0f

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DISCLOSURE

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

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Reply: Patient Satisfaction in Unilateral and Bilateral Breast Reconstruction

I would like to thank Drs. Bonomi et al. for their commentary on our recent article.¹ While this retrospective study did show higher patient satisfaction with autologous reconstruction in the unilateral setting, not all patients are candidates, nor necessarily desire, this approach. I applaud Bonomi et al.'s insight into their method for improving patient satisfaction with implantbased reconstruction, since we all collectively strive to improve our patients' outcomes.

Although not highlighted in the article, the vast majority of our patients go on to have contralateral symmetry procedures after both implant-based and autologous unilateral reconstruction. We did not do a subgroup analysis looking at the small number of patients who did not have such a procedure and its impact on their satisfaction. However, I agree with the authors that achieving symmetry is critical to improving patient outcomes. Similarly, we also discuss options for eventual contralateral shaping procedures at the initial consultation. Our group does not have any experience with the extraprojection implants cited by Bonomi et al., but I am cautious about their ability to extend implantbased reconstruction to virtually all women. The use of prosthetics in the previously irradiated patient can be fraught with complications. Our group has recently looked at the impact of complications on patient satisfaction following breast reconstruction; when looking only at patients who developed a complication, those with an implant reconstruction were 16 times as likely to be aesthetically dissatisfied as those with another type of reconstruction.² Further, we cannot discount the impact of the so-called fourth dimension of plastic surgery-time. All types of unilateral reconstructions will change as the patient ages, and the symmetry initially achieved, and the patient's overall satisfaction, may be significantly affected.^{3,4} This negative effect has been reported to be more significant for implant-based reconstruction compared with autologous tissue over the long term.³

I applaud the authors' innovative use of new technologies and evolving techniques to improve both patient satisfaction and outcomes. In conclusion, I will borrow from the excellent critique by Dr. Crosby of our article: "[T]he next step in this endeavor will be a more complete, objective evaluation of outcomes based on prospectively evaluated variables most critical to maximizing treatment outcomes."⁵ DOI: 10.1097/PRS.0b013e318230bfa0

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Chest Wall Reconstruction for Locally Advanced Breast Cancer with the V-Y Thoracoabdominal Perforator Flap

Sir: e read with great interest the article by Munhoz et al. entitled "Immediate Locally Advanced Breast Cancer and Chest Wall Reconstruction: Surgical Planning and Reconstruction Strategies with Extended V-Y Latissimus Dorsi Myocutaneous Flap," and we congratulate the authors on their study.¹ Plastic surgeons play an important role in the treatment of locally advanced breast cancers because they can provide adequate coverage of the chest wall, allowing wide resections that would have been otherwise unachievable. There are many methods for chest wall reconstruction, and these include the transverse rectus abdominis musculocutaneous flap, the latissimus dorsi myocutaneous flap, and the deep inferior epigastric artery perforator flap. Contralateral breast, external oblique myocutaneous V-Y,2 and extended V-Y latissimus dorsi flaps³ have been successfully described for the resurfacing of large chest wall defects as well. All of these techniques present variable morbidity for patients, who often have comorbidities in addition to the advanced breast cancer.

We would like to take the opportunity to briefly describe the use of a V-Y advancement fasciocutaneous flap based on anterior thoracoabdominal wall perforators. This flap involves a large triangular area of the anterolateral abdominal wall. The three edges of the flap are dissected down to the muscular level. The flap is centered on perforators arising from the deep superior epigastric artery and intercostal arteries, which are identified and preserved. As these perforators are lo-