

Immediate and Delayed Contralateral Symmetrization in Oncoplastic Breast Reduction: Patients' Choices and Technique Formulation

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Sir:

Oncoplastic breast surgery (OBS) has opened a new chapter in breast conservation for breast cancer treatment and, as implied by its name, combines principles of oncologic and plastic surgery techniques. The comprehensive features of OBS promise a much better aesthetic result compared with conventional approaches, through which the “oncologic surgery” portion excises the tumor with adequate margins, the “plastic surgery” portion repairs the excision defects, and in case these features lead to breasts asymmetry, as the third feature, “contralateral procedures for symmetrization” are performed so that finally both breasts look identically alike. Accordingly, OBS not only saves patients' lives but also returns back their beauty and quality of life.¹ Regarding contralateral procedures for symmetrization, there are notable issues often debated that if are considered well may significantly improve final aesthetic outcomes and patients' satisfaction. These issues include the indications for contralateral procedures, the appropriate timing for procedures, patients' possible choices, and to achieve optimal aesthetic results, appropriate technique formulation. We aim to discuss these points in this article.

FOR WHOM ARE CONTRALATERAL PROCEDURES ARE INDICATED?

In OBS, based on the proportions of breast volumes to be excised, the techniques are categorized into 2 levels. Level-I OBS applies for less than 20% excisions in which the skin is incised over the tumor (but not resected), and by a scoop-like resection, the tumor with its adequate margin is removed. The excision defects here are repaired using simple tissue reapproximation. Level I is applicable for any tumor locations within the breast, and with this small proportion to be excised, shape deformities and asymmetries are unlikely, whereas level II is for larger 20–50% excisions and comprises a variety of techniques for different tumor sizes and locations. The techniques used in the plastic surgery portion of level II are mainly determined by the extent of defects made through oncologic resections, so smaller defects are refilled by tissue displacement techniques (glandular reshaping), larger defects by tissue replacement techniques (flaps), and when the defects cannot be repaired by displacement-replacement techniques, “breast reduction” is then performed making a smaller and rounder breast.^{2–4}

Due to size reductions of the diseased breast because of volume excisions, contralateral symmetrizing procedures are mainly breast reductions. According to the above-mentioned technical facts, 2 groups are indicated for contralateral reductions for symmetrization. One includes the patients undergoing level-II OBS in whom the defects cannot be repaired using tissue displacement or replacement techniques; in them, the diseased breast (and the contralateral one for symmetrization) necessarily needs to be reduced (*curative breast reduction*). The other group includes those with very large breasts having small proportionate tumors that a displacement or replacement technique (either level-I or level-II OBS) may simply repair the excision defects, but the very large sizes of their breasts are a serious aesthetic concern. In this group, breast reduction is aesthetically indicated (*aesthetic breast reduction*) and definitely is a patient's option.

THE TIMING CHALLENGES

It is still controversial whether reductions should be performed immediately or on a delayed basis,

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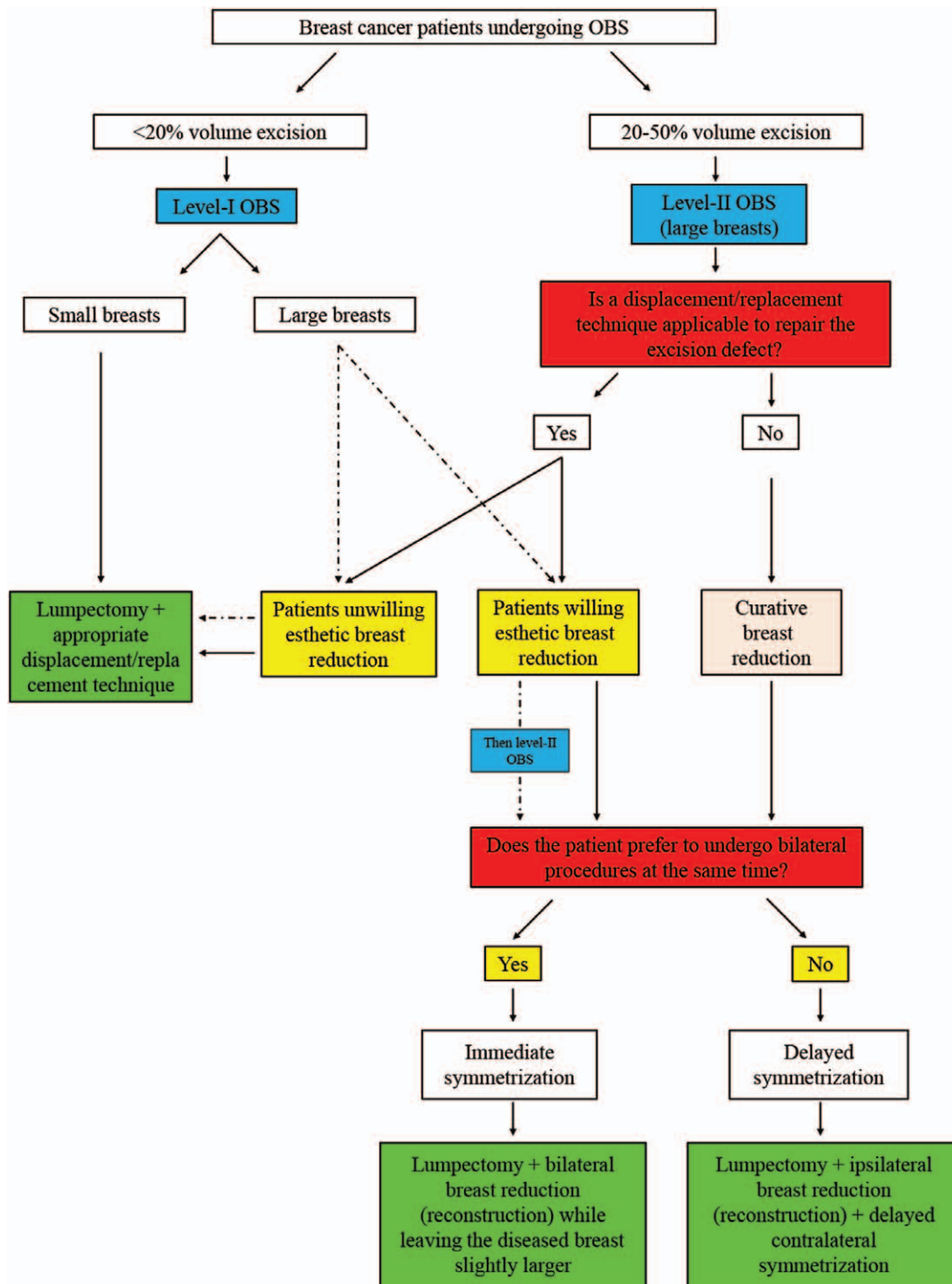


Fig. 1. Techniques of OBS now are categorized into level I and level II based on the amount of breast volumes to be excised (<20% and ≥20–50%). In OBS context, there are 2 groups of patients who may undergo bilateral breast reduction; one includes those with large breasts whose tumors cannot be removed and repaired by tissue displacement or replacement techniques; so they are destined to breast reduction (curative breast reduction). The other includes those with large breasts whose tumors can safely be removed and repaired by tissue displacement or replacement techniques, but the very large size of their breasts is a serious aesthetic concern. Patients of the latter group aesthetically have the choice whether or not to undergo breast reduction (aesthetic breast reduction). In those finally planned for breast reduction (both curative and aesthetic), patients also have the option to choose between immediate and delayed procedures. In this diagram, red squares are key questions to separate curative and aesthetic intents of breast reduction and also the timing of the procedure, yellows are where the patients get an option, and greens are how the techniques should be formulated accordingly.

as both have their benefits and also challenges. Immediate symmetrization has the advantage of combining 2 procedures in 1 operation, so letting the patients leave the operation room with no more procedures remaining, whereas—as the authors also believe—delayed symmetrization is both oncologically and aesthetically more beneficial for the patients because first, the diseased breast later has to undergo radiotherapy and radiation potentially may shrink the tissue and downsize the breast. If the symmetrization procedure be performed before adjuvant radiotherapy, asymmetries are possible outcomes again after these treatments. Second, reoperations for any reason or recurrence may respectively necessitate other procedures and mastectomies that may alter the shape of the diseased breast. Logically, we had better wait until the final look of the diseased breast emerges, and thereupon, the contralateral breast be symmetrized. Third, surgical manipulation of the healthy breast doubles the risks of complications and wound issues; as these may postpone the commencement of adjuvant therapies in patients with cancer, such risks should be avoided. Fourth, the prolongation of operation time due to concomitant bilateral reductions may put the surgeons at risk for technical failures or patients at prolonged anesthesia risks. Finally, insurances in some developing countries do not cover aesthetic surgeries; this will cost a patient with cancer who already is challenged with the expenses of her cancer treatment, extra charges. Maybe at a later time when the cancer's gone, she can afford this aesthetic portion. Even in developed countries with insurances covering such surgeries, if optimal aesthetic results are not obtained by any means (which there is no guaranty for that), immediate symmetrization may become a waste of resources!⁵

PATIENTS' OPTIONS

Provided with this background, the intent of contralateral symmetrization procedures is purely aesthetic, so they may be performed immediately or on a delayed basis. The timing of contralateral symmetrization should primarily be approved by multidisciplinary teams considering patients' individual conditions, such as their age, comorbid statuses, surgical and oncologic risks, contralateral pathologies, or incidental findings. If no specific circumstances oncologically obligate the immediacy or delay of the contralateral procedure, it is the patient who gets to even choose whether or not to undergo contralateral procedures or to determine the timing, considering her own personal, social, and financial conditions. Surgeons' role here maybe is to provide realistic per-

spectives of the outcomes regarding different timings of the symmetrization.

TECHNIQUE FORMULATION

Based on patients' own will, they may be categorized into 3 groups and appropriate techniques may be formulated as follows:

1. Patients unwilling any contralateral procedures: with no procedures performed on the contralateral breast, attempts are technically made to keep the diseased breast as symmetric as possible to the healthy one primarily by tissue displacement/replacement techniques. If displacement/replacement techniques were not applicable, the patients have to accept the discrepant sizes and shapes of the breasts (although later symmetrization remains a chance).
2. Patients preferring an all-in-one operation (willing immediate symmetrization): concomitant bilateral reductions are performed. They also have to accept possible postsurgical asymmetry owing to radiotherapy-induced breast downsize. Surgeons also may leave the diseased breast a bit larger to precompensate the radiation effect.
3. Patients desiring optimal aesthetic results (willing delayed symmetrization): here, attempts are made so the diseased breast gets its optimal aesthesis uniquely and regardless of the contralateral breast; later after completion of adjuvant treatments, the new look of diseased breast will be used as pattern for contralateral symmetrization (Fig. 1).

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