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EDITOR'S INVITED COMMENTARY

Invited Discussion on: Breast Asymmetry, Classification and Algorithm of Treatment—Our Experience

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The authors present a new classification of breast asymmetry based not on morphology or pathology of the breasts but based on the patient's self-consciousness of their deformity of asymmetry. They also present an algorithm of treatment based on their classification.

In a retrospective series of 343 patients over a nine-year period, the authors classified three groups of patients with breast asymmetry based on the patient's awareness of their own deformity. Group 1 was unaware of asymmetry, and the asymmetry was assessed as being present by the operating surgeon. In Group 2, the patients had a preoperative awareness of breast asymmetry, and in Group 3, the patients had an awareness of their breast asymmetry but they suffered more because of the awareness of wearing padded brassieres and also having difficulty wearing clothes and suffering more from their asymmetrical breasts than either Group 1 or Group 2.

The treatment algorithms combined the awareness of the asymmetry classifications 1, 2 and 3 with the size of the breast volume the patient desired, whether it was 250 mls, 250–500 mls or 1000 mls or greater. The patients received standard surgical management for breast asymmetries which included breast augmentation, mastopexy, breast reduction and hybrid breast augmentation and fat injections.

The most revealing table is Table 1 which lists the various surgical procedures carried out for each group. Group 1 had symmetrical procedures. Group 2 had asymmetrical procedures as did group 3. The revision rates for each group were relatively small: in Group 1, 6/182; in group 2, 8/124; and in group 3, 3/37 patients.

The patients were followed at 6 monthly intervals and at 48 months received a Visual Analogue Scale anonymous questionnaire (VAS questionnaire) which evaluated their satisfaction and self-esteem. 1 was worst and 10 best. If the scale was 6, it indicated a "very satisfied patient".

A statistically significant difference occurred in the overall satisfaction between the groups. Group 1 is more satisfied than Group 2, and Group 2 is more satisfied than group 3. The overall satisfaction rate for all the groups was 77%, but a significant statistical difference between groups 1, 2 and 3 was 89.8% to 70.5% to 43.5%. These findings may be at odds with traditional thinking that the more major a congenital defect as in group 3, the more likely the patient would be satisfied with a reconstructive effort [1]. Most major asymmetries in group 3 would likely have been noted and caused anxiety in the earlier teenage years and hence presented earlier. Later presentation could mean that the patient by the time they presented had a "spoilt" image so that the patient was unlikely to have a significant improvement in their self-esteem from any anticipated surgery [2]. The low satisfaction in group 3 could also be due to the high percentage of asymmetrical scar patterns that occurred than in Groups 1 and 2 [3].

The findings are at odds with a recent study of breast reduction patients utilizing the BREAST-Q reduction module. However, the patients in this study with the most

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Table 1 Summary of surgical procedures performed

Group	Surgical Procedures	No.
I	Bilateral breast augmentation with same size implant/ Dual plane implant	27
	Bilateral breast augmentation with same size implant/ Sub-glandular implant	64
	Bilateral breast symmetric augmentation mastopexy with same size implant	18
	Bilateral symmetric mastopexy	39
	Bilateral symmetric breast reduction	34
II	Hybrid Breast Augmentation with Same Size Implants	63
	Bilateral Breast Augmentation with Same Size Implants with Asymmetric mastopexy/reduction	37
	Bilateral asymmetric mastopexy/ reduction	22
	Unilateral breast reduction	2
III	Bilateral Breast Augmentation with Different Size Implants	14
	Unilateral Breast Augmentation	1
	Bilateral Breast Augmentation with Different Size Implants with Asymmetric Mastopexy/reduction	6
	Unilateral Breast Augmentation + Asymmetric Mastopexy	3
	Unilateral Breast Augmentation + Unilateral Reduction	4
	Bilateral Asymmetric Reduction	4
	Unilateral Breast Mastopexy+ Unilateral Reduction	2
	Unilateral Breast Reduction	2

severe asymmetry and hypertrophy were the most satisfied with their surgical results [4].

The assignment of groups based on the assessment by one surgeon could also be questioned. One also has to be aware of the weakness of VAS scaling by patients, which is purely subjective and difficult to evaluate as there is often considerable variation in patient's subjective assessment of an objective deformity or asymmetry.

Psychological testing would be a pertinent adjunct to history taking and assessment by a single surgeon, and the BDDQ (Body Dysmorphic Disorder Questionnaire) and the Rosenberg Self-Esteem Scale would be useful tools to aid the surgeon in preoperative assessment of the patient's psychological reactions to their deformity [4, 5].

So many social factors play into long-term satisfaction with any aesthetic surgery, in particular breast surgery. Also, changes occur more frequently in the breasts than probably any other parts of the body due to pregnancy and menopause changes and changes in weight. The authors acknowledge that demographic variables such as age, education, employment and relations affect the psychological adjustment to surgery and the quality of life outcomes.

The article brings to light lower satisfaction rates for surgery of asymmetries when patients are aware of and concerned about and use avoidance or camouflage to lessen their stress. These patients are more likely to be dissatisfied with their overall results of the surgical correction. It is remarkable that significant asymmetries are often not noted by patients when examined by the surgeon; however, if they are not noted by the surgeon preoperatively, then postoperatively the patients acquire the knowledge that they do have asymmetries and proclaim dissatisfaction.

The BFACE is a good framework for evaluating asymmetries and has recently been published to endorse a thorough evaluation and documentation preoperatively rather than being alerted to the morphological problems postoperatively [6].

Satisfaction overall remains high for all breast aesthetic surgeries but the asymmetries seem to when noted by the patient appear to be less satisfied and their postoperative results did not "match" their expectations; hence, their expectations were unrealistic in some cases [7].

Dissatisfaction in today's environment of Internet culture, information overload, extended social media time has led to patients instantaneously complaining if they are not pleased with a result with a subsequent negative site review as an initial response to dissatisfaction.

The article alerted me to the fact that the dissatisfaction rate was higher than I expected when the patient was conscious of the asymmetry and used avoidance and camouflage techniques to lessen the physical and emotional stress of their deformity. The paper emphasized that we should explore thoroughly the negative psychological consequences of asymmetry and take that into account when predicting the overall satisfaction which might result from a surgical approach to correct asymmetries.

Compliance with Ethical Standards

Conflict of Interest The author declares that he has no conflicts of interest to disclose.

Ethical Approval This article does not contain any studies with human participants or animals performed by any of the authors.

Informed Consent For this type of study, informed consent is not required.

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