Aesth Plast Surg (2019) 43:1415–1416
https://doi.org/10.1007/s00266-019-01414-5

LETTER TO THE EDITOR

Does Standardized Practice Reduce Complications in Breast Augmentation Compared with Non-standardized One?

Chengcheng Li[1] · Xingyi Du[1] · Yi-ye Ouyang[1] · Chunjun Liu[1]

Received: 25 May 2019 / Accepted: 30 May 2019 / Published online: 7 June 2019

Level of Evidence V This journal requires that authors assign a level of evidence to each article. For a full description of these Evidence-Based Medicine ratings, please refer to the Table of Contents or the online Instructions to Authors www.springer.com/00266.

Dear Editor,

We read with interest the article entitled "Standardized Practice Reduces Complications in Breast Augmentation: Results with the First 290 Consecutive Cases Versus Non-standardized Comparators" in *Aesthetic Plastic Surgery* [1], where Adriano Santorelli et al. presented a retrospective study on 525 patients undergoing breast augmentation at a single center to compare the complication rates among two groups of patients receiving surgical techniques. They came to the conclusion that use of a standardized approach to breast augmentation reduced the risk of postoperative complications. We would like to congratulate Adriano Santorelli and coworkers for their paper. During the past decade, our hospital has performed more than 2000 breast augmentations, and we would like to express our opinions on the study.

Firstly, some issues with regard to their study design draw our attention. They divided patients into "standardized surgery" and "non-standardized surgery" groups. After a careful analysis of the classification, we found that the two groups may have many similarities and less comparability. When they divided patients into two groups, one group of patients underwent breast augmentation based on the five P's of Randquist while the other was based on Tebbetts' preoperative measurements. Actually, we cannot deny that the five P's of Randquist and the 14-point plan, based on breast augmentation principles of Tebbetts, should be regarded as a good summary and extension of Tebbetts. Years of breast augmentation experience told us that the postoperative outcome may vary due to the surgeon's individual training, personal experiences and understanding of different surgical procedure. In other words, if we want to make a comparison between the two procedures, the outcomes from multicenter surgeons who indeed become proficient in the procedure may have strong credibility and effectiveness. At the same time, we were surprised to find that the most conspicuous complication among the two groups is wound dehiscence (non-standardized surgery: standardized surgery; 10.6%: 2.1%), which is considerably different from the common complication in a previous study such as capsular contracture, implant malposition, rippling, hematoma and seroma [2]. Based on more than two decades of clinical experience, Tebbetts [3] proposes that the three-layer closure produces more inflammatory reaction in the wound that lasts significantly longer compared to a two-level closure and does not afford greater protection against fluid leak or scar widening compared to an optimal two-layer closure. Consequently, we take a bold guess that wound dehiscence may stem from the inherent suturing technique of the performer, which strongly demonstrates the great impact originating from the "learning curve" on final outcome. Secondly, despite the fact that one group of patients underwent periareolar incision augmentation while another group underwent inframammary incision augmentation, it is strange that the rates of capsular contracture between the two groups show no significant differences, which may be quite contrary to a former study. In a meta-analysis with a

✉ Chunjun Liu
liuchunjun@psh.pumc.edu.cn

[1] Plastic Surgery Hospital (Institute), Chinese Academy of Medical Sciences, Peking Union Medical College, No. 33 Badachu Road, Shijingshan District, Beijing 100144, China

random effect model, Li et al. [4] reported a higher rate of capsular contracture in the periareolar group than in the non-periareolar group (7.2% vs. 3.1%, $p = 0.03$). We would consider that it is a short follow-up time that contributes to this comparable different outcome. According to a 10-year study including 5122 implants [5], the majority of capsular contracture (80%) occurred within 5 years and half (41%) within 2 years. Therefore, we suggest researchers should extend the follow-up time to 5 years to acquire more a reliable rate of capsular contracture. Finally, we harbor one question about their evaluation of patient-reported satisfaction. In their study, patient satisfaction with their breasts was assessed on a scale of 0 (very negative) to 10 (very positive). Obviously, they can replace their current satisfaction evaluation with the BREAST-Q in the future to acquire comprehensive results on satisfaction with breasts, sexual well-being, outcome and other aspects of satisfaction, which simultaneously facilitates patient to complete the evaluation.

Taken together, we appreciate the researcher's work to perform a large sample single-center study to demonstrate that the use of standardized procedures can significantly reduce overall complication rates with high levels of patient satisfaction. However, we anticipate that a more careful and precise grouping in a multicenter trial, follow-up time extension, including BREAST-Q evaluation, will undoubtedly help us to yield a more reliable and credible result, which definitely promotes the advancement of modern breast augmentation.

Funding This study was funded by PUMC Youth Fund & the Fundamental Research Funds for the Central Universities (No. 3332015156).

Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflict of interest.

Statement of Human and Animal Rights or 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.

Financial Disclosure Statement PUMC Youth Fund & the Fundamental Research Funds for the Central Universities (No. 3332015156) were received for this article.

References

1. Santorelli A, Rossano F, Cagli B et al (2019) Standardized practice reduces complications in breast augmentation: results with the first 290 consecutive cases versus non-standardized comparators. Aesthet Plast Surg 43:336–347
2. Somogyi RB, Brown MH (2015) Outcomes in primary breast augmentation: a single surgeon's review of 1539 consecutive cases. Plast Reconstr Surg 135:87–97
3. Tebbetts JB (2010) Augmentation mammaplasty: redefining the patient and surgeon experience. Mosby Elsevier, Amsterdam
4. Li S, Chen L, Liu W et al (2018) Capsular contracture rate after breast augmentation with periareolar versus other two (inframammary and transaxillary) incisions: a meta-analysis. Aesthet Plast Surg 42:32–37
5. Calobrace MB, Stevens WG, Capizzi PJ et al (2018) Risk factor analysis for capsular contracture: a 10-year Sientra study using round, smooth, and textured implants for breast augmentation. Plast Reconstr Surg 141:20S–28S