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Reply: The Effects of Facial Lipografting on Skin Quality: A Systematic Review

Sir:

We would like to thank Valente and Zanella for their letter in response to our systematic review.¹ The first remark by Valente and Zanella contradicts our main conclusion: facial lipofilling or any component of adipose tissue (e.g., stromal vascular fraction or adipose-derived stromal cells) does not detectably, measurably rejuvenate aged skin.¹ However, scientific evidence of well-executed randomized clinical trials with validated measurement tools is lacking, and the only published well-designed randomized clinical trial shows no effect of facial lipofilling on skin elasticity. Our hypothesis is that ordinary aging of the skin is a normal physiologic process in which certain components of the extracellular matrix (e.g., elastin) gradually disappear because of wear and tear and ultraviolet exposure causing deformations. In other aspects, such as epidermal regeneration, perfusion, and neurosensation, no remarkable changes occur because of aging. Thus, adipose-derived stromal cells in adipose tissue have little to repair. Moreover, de novo generation of dermal elastin is often considered absent or inefficient; however, this would not lead to tightening of the expanded aged tissue. In this way, aging-related skin changes are not considered damaged tissue and do not result in clinically identifiable changes of the skin as a result of facial lipofilling. In comparison, pathologic processes (e.g., dermal fibrosis or chronic wounds) go along with an imbalance of extracellular factors, resulting in inflammation, excessive extracellular matrix deposition and crosslinking, or a lack of angiogenesis. Lipografting reeducates the damaged tissue by the stromal vascular fraction of adipose tissue. Although no significant improvements have been described as a result of lipofilling applied to the “ordinary” aging skin, significant improvement of the skin

quality has been described in cases where skin changes occurred because of an imbalance of extracellular factors.^{2,3} Thus, a clear distinction should be made in future studies using lipofilling for skin rejuvenation purposes of “ordinary” aged skin or pathologic processes of the skin (e.g., scars, fibrotic diseases, or wound healing). Thus far, the only proven effective application for lipofilling is the restoration of volume loss.⁴ Moreover, the volumizing effect of lipofilling results in reduction of dermal wrinkles as well by increasing subcutaneous volume.

As a second point, Valente and Zanella suggested that we overstate our results with regard to the safety of facial lipofilling in the Conclusions section of our systematic review. A systematic review that is conducted according to validated guidelines can provide collated information of the specific question one might want answered. As a result of following these validated guidelines, self-bias and our own opinion are reduced to a minimum. The question that was asked by the authors, whether facial lipofilling is a safe procedure, can consequently not be answered by a single study of a single center that in their case demonstrated an infection rate of 4.8 percent and an overall complication rate of 13.6 percent.⁵ Moreover, all other studies included in our systematic review did not mention any complication. This might be because of selectively not reporting nonsignificant minor complications. Nevertheless, the safety of facial lipofilling is an interesting and clinically relevant issue.

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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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Removal of Nasal Silicone Implant and the Impact of Subsequent Capsulectomy

Sir:

In the article by Kook et al.,¹ a concomitant periimplant capsulectomy is verified to be required in post-rhinoplasty silicone implant extraction. Preremoval/postremoval nasal bridge length index and nasolabial angle were measured as clinical endpoints for evaluating the effect of subsequent capsulectomy in preventing and correcting the deformity. However, some problems related to reliability and credibility still need to be clarified in this study.

First, this study is a retrospective analysis of a small sample in a single center. A previous study indicated that denatured changes are related not only to silicone itself but also to each person's immunity and general health condition and thus his or her propensity for foreign body reaction and inflammatory changes.² Therefore, some common factors such as age, sex, and various reasons for revision surgery should be included in the multifactor analysis. In addition, baseline conditions of the

three groups were not comparable, too much bias was not taken into consideration, and some mixed factors that should be balanced out before analysis potentially influence the credibility of conclusions. For instance, group 3, which preoperatively had a more severe nasal contraction than the other two groups, achieved the greatest improvement after a series of operations, including capsulectomy, silicone implant, and tip graft removal, but attributing these different initial levels of improvement to capsulectomy was clearly invalid.

Furthermore, the explicit definition for remarkable contracted nasal appearance was not given, which meant that the criteria for choosing capsulectomy were subjective. It was also not reasonable or reliable to set those criteria as capsulectomy indications.

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Reply: Removal of Nasal Silicone Implant and the Impact of Subsequent Capsulectomy

Sir:

We appreciate the interest in our article¹ shown by Drs. Pu and Han and thank them for raising some good questions. All operations were performed at a single center, but the photographic and statistical analyses were performed in cooperation with the Department of Plastic and Reconstructive Surgery and the Department of Biomedical Statistics at Yonsei University College of Medicine (Seoul, Republic of Korea). Statistical analysis was performed by analysis of variance and