Reply: Polydioxanone Threads for Facial Rejuvenation: Analysis of Quality Variation in the Market

Sir:

I thank Dr. Gülbiiti et al. for their interest in our article, “Polydioxanone Threads for Facial Rejuvenation: Analysis of Quality Variation in the Market” and congratulate her on the recent systematic review publication on polydioxanone thread efficacy for facial rejuvenation. I would like to particularly applaud Gülbiiti et al. for thoroughly evaluating the literature to determine the effect of thread lifts as just limited. Although not having conducted studies to generate reliable data on the matter myself, I also feel that in my personal clinical practice, thread lift results are not as permanent as described by industry and some colleagues.

However, the article presented by me and my research team is not a clinical article and contains no clinical data. We found a significant difference in quality variation among the threads on the market with European Conformity marks, and this variation in quality is an aspect we should be aware of when selecting thread brands to work with. It is a basic science article assessing material quality and biocompatibility. Therefore, we never thought to give concrete clinical recommendations or share results regarding the longevity of thread lifts. On the contrary, we demand caution and not as permanent as described by industry and some colleagues.

We regret not listing the article by Gülbiiti et al., which would have benefited our Discussion section. However, our article was submitted to Plastic and Reconstructive Surgery initially in May of 2018 and written largely in 2017. When one checks the references carefully, one will not find any article from 2018 for that reason. The article by Gülbiiti et al. was simply published too late to be included. I certainly believe it will still find the audience it deserves in particular now, as we have discussed it extensively in this letter correspondence.

DOI: 10.1097/PRS.0000000000006990

Dominik Duscher, M.D., Ph.D.
Division of Experimental Plastic Surgery
Department of Plastic and Hand Surgery
Technical University Munich
Ismaninger Strasse 22
81675 Munich, Germany
dominik.duscher@tum.de
Instagram: @dr.dominikduscher

DISCLOSURE

The author has no financial interest to declare in relation to the content of this communication.

REFERENCES


The Use of Higher Proportions of Platelet-Rich Plasma to Enrich Microfat Has Negative Effects: A Preclinical Study

Sir:

We read the recent article entitled “The Use of Higher Proportions of Platelet-Rich Plasma to Enrich Microfat Has Negative Effects: A Preclinical Study.” This is an interesting study that compares and analyzes the effect of platelet-rich plasma with different platelet concentrations on autologous fat grafts. More attractive is that the results reported in this article—that platelet-rich plasma did not increase fat graft survival and that a higher platelet level was associated with poor graft survival—are contrary to most prior studies. However, we have a few questions about the experimental design, which may be the cause of the negative results.

The authors claimed to classify platelet-rich plasma with different concentrations of platelets into low-dose, medium-dose, and high-dose groups. However, these different concentrations of platelet-rich plasma were in fact made by dilution with platelet-poor plasma. In this way, the product cannot be regarded as pure platelet-rich plasma. It may be more appropriate to mix platelet-rich plasma and autologous fat at different ratios to evaluate the effect of different concentrations of platelet-rich plasma on fat graft survival. At the same time, we noticed there is a sentence in the section on platelet-rich plasma preparation: “The supernatant served as platelet-rich plasma.” We believe this is a typographic error, because the supernatant should be platelet-poor plasma.

After the production of platelet-rich plasma, a large amount of serum containing considerable growth factors will be gradually released. This is why platelet-rich plasma should be applied as soon as possible after its preparation. Therefore, on the first day after transplantation, a considerable part of the graft in the three mixed groups was quickly absorbed by the recipient area, not to mention that the author used platelet-rich plasma diluted with platelet-poor plasma, which was of course absorbed faster. Platelet-rich plasma and other platelet concentrates share a characteristic with fibrin glue, that is, they will be completely degraded in the body in approximately 2 weeks. The authors added a high ratio of platelet-rich plasma in the three mixed groups. After degradation of platelet-rich plasma, the volume retention rate of these mixed groups will inevitably be lower than that of control group because the authors still considered 0.4 ml as the initial volume.