Letter on Smoking and Physical Activity Significantly Influence Stromal Vascular Fraction Cell Yield and Viability

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Sir,

We read with great interest the article entitled “Smoking and Physical Activity Significantly Influence Stromal Vascular Fraction Cell Yield and Viability” by Andjelkov K et al. [1] in *Aesthetic Plastic Surgery*. In this article, the authors performed a multiple linear regression analysis to find predictors affecting the stromal vascular fraction (SVF) cell yield and viability from the lipoaspirate. Based on their statistical analyses, smoking and physical activity are two predictors related to the decreased SVF cell yield and viability.

During the preoperative education, we usually inform patients to quit smoking for the better graft survival. This study provides the evidence for this preaching. In addition to the authors’ mention that smoking undermines the regenerative capacity of mesenchymal stem cells in the fat graft, smoking also leads to vasoconstriction [2], which is not conducive to the reconstruction of blood supply of grafts in the recipient area.

In the study, the authors concluded that physical activity had a negative correlation with SVF cell viability. However, body mass index (BMI) did not influence the SVF cell yield and viability. It is common sense that physical

activity and BMI have a certain relationship. This inconsistency is confusing. Besides, in the discussion section, the authors did not elucidate much on the negative correlation between physical activity and SVF yield and viability based on their multivariate analysis. Can we think that physical activity before operation undermines fat graft survival?

Declarations

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

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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