



Letter to the Editor

Response to "Comments on 'The Effects of Fat Harvesting and Preparation, Air Exposure, Obesity, and Stem Cell Enrichment on Adipocyte Viability Prior to Graft Transplantation"

Aesthetic Surgery Journal 2017, Vol 37(4) NP42 © 2017 The American Society for Aesthetic Plastic Surgery, Inc. Reprints and permission: journals.permissions@oup.com DOI: 10.1093/asj/sjx013 www.aestheticsurgeryjournal.com

OXFORD UNIVERSITY PRESS

Rodolfo Cucchiani, MD; and Luis Corrales, MD

Editorial Decision date: January 11, 2017; online publish-ahead-of-print February 12, 2017.

We appreciate the Letter to the Editor by Chenglong Wang and Jie Luan.¹

With respect to the first point, the body mass index (BMI) cutoff level used in our study (BMI greater than or equal to 30 kg/m²) was decided on the basis that previous stages refer to overweight and preobesity. We wanted to find a definitive conclusion about whether adipocytes in obese individuals show a diminution in viability, and we considered that taking the obese-only group (BMI \geq 30 kg/m², according to the World Health Organization) would allow us to reach that conclusion.

On the second point, the greater survival of adipocytes prior to injection in the host is achieved based on adequate harvesting, processing, and transfer techniques. Different variables affect its viability. The hypertrophy of adipocytes in obese patients and their "little possibility to regrow," as mentioned by Wang and Luan, does not seem to us to cause the decrease in the viability observed in this group; large adipocyte size and its inherent fragility to mechanical trauma seems to be the cause of viability diminution as we mentioned in our paper.²

Regarding the third point, it should be mentioned that the purpose of our paper was to objectively measure and compare the processes prior to the relocation in the host, due to the possibility of standardization. There is a constant search in the world literature for standardization of the receptor bed, but variables are diverse: cutaneous retractions, radiodermitis, scars, inelastic skin, inadequate vascular bed, etc., which compromise the viability of the adipocyte.³ This implies that an adequate in vitro model similar to that found in vivo has not yet been achieved.

Disclosures

The authors declared no potential conflicts of interest with respect to the research, authorship, and publication of this article.

Funding

The authors received no financial support for the research, authorship, and publication of this article.

REFERENCES

- 1. Wang C, Luan J. Comments on "The Effects of Fat Harvesting and Preparation, Air Exposure, Obesity, and Stem Cell Enrichment on Adipocyte Viability Prior to Graft Transplantation". *Aesthet Surg J.* 2017;37(4):NP40-NP41.
- 2. Cucchiani R, Corrales L. The effects of fat harvesting and preparation, air exposure, obesity, and stem cell enrichment on adipocyte viability prior to graft transplantation. *Aesthet Surg J.* 2016;36(10):1164-1173.
- 3. Gottrup F, Agren MS, Karlsmark T. Models for use in wound healing research: a survey focusing on in vitro and in vivo adult soft tissue. *Wound Repair Regen*. 2000;8(2):83-96.

From the Plastic Surgery Division, Hospital Universitario Austral, Buenos Aires, Argentina.

Corresponding Author:

Dr Rodolfo Cucchiani, 2 Los Cipreses Av., 1629 Pilar, Buenos Aires, Argentina.

E-mail: rcucchiani@yahoo.com