



The Addition of Platelet-Rich Plasma to Facial Lipofilling: A Double-Blind, Placebo-Controlled, Randomized Trial.

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Abstract

BACKGROUND: Lipofilling is a treatment modality to restore tissue volume, but it may also rejuvenate the aging skin. Platelet-rich plasma has been reported to augment the efficacy of lipofilling, both on graft take and rejuvenation, by altering the adipose-derived stem cells. The authors hypothesized that addition of platelet-rich plasma would increase the rejuvenating effect and shorten recovery time.

METHODS: The study conducted was a single-center, double-blind, placebo-controlled, randomized trial (2012 to 2015). In total, a well-defined cohort of 32 healthy female patients enrolled in the study, with 25 completing the follow-up. All patients underwent aesthetic facial lipofilling with either saline or platelet-rich plasma added. Outcome was determined by changes in skin elasticity, volumetric changes of the nasolabial fold, recovery time, and patient satisfaction during follow-up (1 year).

RESULTS: Platelet-rich plasma did not improve the outcome of facial lipofilling when looking at skin elasticity improvement, graft volume maintenance in the nasolabial fold. Reversal of the correlation between age and elasticity, however, might suggest a small effect size, and thus might not be significant with our small study population.

CONCLUSIONS: This randomized, double-blind, placebo-controlled study clearly has shown that platelet-rich plasma significantly reduces postoperative recovery time but does not improve patient outcome when looking at skin elasticity, improvement of the nasolabial fold, or patient satisfaction. The reversal of the correlation between age and elasticity might indicate some effect on skin but requires more power in future studies.

CLINICAL QUESTION/LEVEL OF EVIDENCE: Therapeutic, II.

Publication types, MeSH terms



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