Autologous Fat Transfer for Facial Recontouring and Rejuvenation

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Background
Clinical use of autologous fat grafts for facial soft-tissue augmentation has grown in popularity in the plastic cosmetic surgery field with undeniable results. Facial rejuvenation with autologous fat has the advantage of replacing or augmenting tissue with like tissue. Beside of the volumizing effects, fat aspirate promotes a rejuvenation process at surrounding tissue by stimulating a neosynthesis of collagen fibers at the recipient site. However successful it is, the outcome of fat graft is technically related. The aim of this study was to present favorite technical details to obtain a better and more predictable results.

Methods
The authors present his current techniques of autologous fat transfer focused on (1) the donor site, (2) aspiration methods, (3) local anesthesia, (4) centrifugation and washing,(5) mixte with PRP and ADSC (6) injection methods, and (7) durability of the grafts.
The main technique is: harvesting abdominal fat with blunt, small cannula technique, preparation by means of centrifugation without washing with addition of PRP, and immediate injection using small cannula (1mm) with all-lay technique.
The assessment was base on standard photo of pre and post operation and patient questionnaire. The 3D technique of Vectra is apply in selected cases.

Results
326 facial augmentation procedures were performed involving the inferior and nose, chin, superior eyelids, malar area, buccal area, lips, nasolabial, marionette folds, frontal, temporal, mental region. Fat transfer volume ranged between 1 and 10 cc per site.
The recovery for patients was short, with a recovery time of 2 to 7 days.
There were no procedure-related complications at the harvest or recipient graft sites.
The need for correction was minimal. The mean patient satisfaction score was 7 on a scale of 0 to 10.

Conclusions
Lipoinjection is the treatment of choice for facial soft-tissue augmentation and rejuvenation. With an almost unlimited source of donor fat for facial grafting, the respect of all right technical details will bring a good and predictable results. With the advent of three-dimensional surface scanners, three-dimensional photography, and software able to access volume restoration, clinical trials can more accurately document results.