

LYPOGOLD METHOD. A STANDARDIZED INJECTION TECHNIQUE OF FAT-RICH IN VASCULAR STROMAL FRACTION FOR A SOFT FACE-LIFT AND REGENERATIVE EFFECT.
GUARINO ENRICO MD
ELITE AESTHETICS INSTITUTE

INTRODUCTION

Regenerative cells found in human fat are a mixed population of stromal and vascular cells found around blood vessels and between adipocytes in the matrix of fat. Most of these cells are covalently bound to small blood vessels in the matrices of fat which surround adipocytes. By definition, Stromal Vascular Fraction (SVF) is composed of stromal and vascular cells. A small proportion of the stromal cells are stem cells, which have been shown to be capable of differentiating into different structures (pluripotency).

SVF cells have been shown to have beneficial effects are associated with numerous trophic factors, growth factors, cytokines, cell signaling molecules, etc. and represent an orchestra of regenerative cells that can be found in human fat.

In order to have the highest percentage of SVF and stem cells the best system involves the use of enzymes that we cannot use in normal outpatient activities. the quality of fat that allows us to have the highest percentage of SVF and SC is represented by the nanofat.

Nanofat technology based on Tonnard and Verpaele's original work is characterized by the fat and tissue parcel size, which is 400 to 600 μm or less. A series of device are used to modify harvested fat into smaller parcels and nanofat. These products each have different injectability characteristics and are used for different applications, including deep fat compartment and periosteal grafting, superficial fat compartment grafting, and dermal and epithelial nanofat delivery.

In this our preliminary work, we decided to use an FDA approved device (MiniTC) that gave us the guaranty of the quality and quantity of nanofat stable for all patients.

Aim of our job was evaluate use a definite dosage of stable nanofat quantity injected with a standard quantity in the face ligaments for obtaining a lifting effect connected with the fat injected and a regenerative effect related to the SC present in this kind of fat.

MATERIAL AND METHODS

Patients who required non-surgical facial treatment were enrolled. Were excluded patients who all patients who had undergone facial surgery in the past three years or patients had been treated with fillers or traction threads in the past twelve months; pregnant patients were also excluded. On the day of treatment, we took the patient took pictures with a standard method and with a device capable of reconstructing the volumes and profiles of the face (Quantificare).

After local anesthesia with Klein solution with infiltration of solution 1 to 1, we remove 40 cc of fat for processing with the Mini TC fat kit.

Once ready, the nanofat were injected, in standard quantities, into the deep insertion planes of the ligaments. For each side of the face were injected 2.5 cc of nanofat with the use of a 23G sharp needle.

All patients were subjected to a follow-up visit after 1, 6, and 12 months with photos taken and administering a satisfaction test of the results.

RESULTS

From January 2019 to February 2020 we treated 20 patients (16 women, 4 men) whit a median age 56yy (36 - 69yy). All the patient completed the protocol.

After the 1 month, we observed a reduction of less of 10 % of the volume obtained with the fat injection in 12 patients, 20 % in 3 patients, and no evidence of a reduction in the 5 remaining patients.

At the 6 months follow up 16 patients was very happy about the results obtained; in 12 of these patients we don't observe any reduction of volume in percentage and in the 4 remaining case the reduction was less of 10% volume.

In the no happy 4 patients, 2 presented a reduction of 20% (woman 65 and 69 yy) and the other 2 around 30% (2 smoker man). For these patients, we decided to wait, in accordance with the patients, the other 3 months before deciding to perform or not a retouch. At further control, all these four patients presented a stable condition and we decided to not doing any kind of treatment.

At the 12 months follow-up, all the patient maintained a stable percentage of the fat and the improvement of the lifting effect.

Conclusion

In light of the results obtained with this method of ours which offers positive results with the conservation of the lifting and volumetric effect in over 80 percent of cases and limited reduction in the remaining 20 percent of cases, we believe this procedure to be successful in the treatment of patients who need treatment lifting and rejuvenation of the face, contained and minimally invasive. The procedure low aggressive with low quantity of fat harvesting and a controlled injection technique with no big volume of processed fat gives the change to use this method also at doctors without a big experience in liposuction.