

# Soft Tissue Contour Correction With Fat Autograft Muscle Injection: An Assessment of Duration of Single Session Correction At One Year

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## INTRODUCTION

A significant aspect of the aging process involving the lower face and the area around the mouth is the loss of the soft tissue volume that supports and lifts over-lying skin structure. A natural replacement for this underlying tissue loss is a bio-identical replacement using autologous fat.

Recent refinements in fat autograft transplantation have included the concept of injecting smaller, interlacing and multi-layered strands of adipose tissue. In addition, the technique of deeper injection into the underlying supportive facial musculature plane or FAMI (fat autograft muscle injection) provides correction using freshly harvested adipose tissue.(1)

## OBJECTIVE

The objective of this study was to evaluate 1) the degree of correction, and 2) the duration of correction achieved with a single session, small volume fat autograft muscle injection to the perioral unit.

## METHODS

Each patient in this study was treated with freshly-harvested autologous adipose tissue, lipoaspirated from either the periabdomen or thigh.

Amar® contoured cannulae were used for the thread-like injections within the muscle planes supporting the perioral unit, which include the depressor labii, depressor labii angularis, levators labii, levator labii angularis, zygomaticus major and minor planes, the buccinator, risorius, and mentalis planes of injection. Patients were asked to evaluate their overall satisfaction with the degree of correction achieved with this procedure as of the review date associated with this study. The patients' subjective scoring of their result was completed employing a 0 through 4 rating scale.

Clinical photographic records of frontal and side plane views were collected at the pre-operative point, and at a post-operative point, with durations of up to 16 months post-procedure. These photographs were then reviewed by a panel of three non-physician participants who provided objective ratings, on a 0 - 4 rating scale, of overall degree of correction.

## CONCLUSIONS

An objective assessment of duration for soft tissue correction is somewhat difficult to quantify since an exact "measurement of correction" was not used, other than the overall visual assessment. However, the blind assessment of correction from the three member independent panel demonstrated a significant correlation with the overall subjective patient assessments.

As observed in this study, at one year post-procedure, bio-identical single session treatment of soft tissue volume loss in the perioral unit may give long lasting correction with a high degree of patient satisfaction. The technique used in this regard is one of small strands of freshly harvested autologous adipose tissue, injected deep into the subdermal and underlying myofascial planes of structural support.

There does remain a variable, by individual patient, as to the duration and persistence of correction. Our observations would suggest that the practitioner's and patient's decision to proceed with additional treatment sessions should be based, not on a fixed schedule of additional correction sessions, but on the relative persistence, or loss, of correction, as observed over a period of time.

(1): Amar, RE. Microinfiltration adipocytaire (MIA) au niveau de la face, ou restructuration tissulaire par greffe de tissu adipeux. Ann Chir Plast Esthet. 1999; 44:593-608.

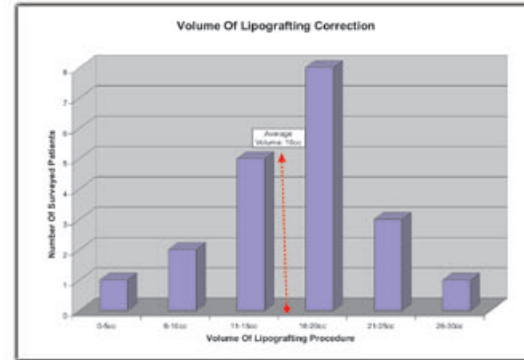


Figure 1

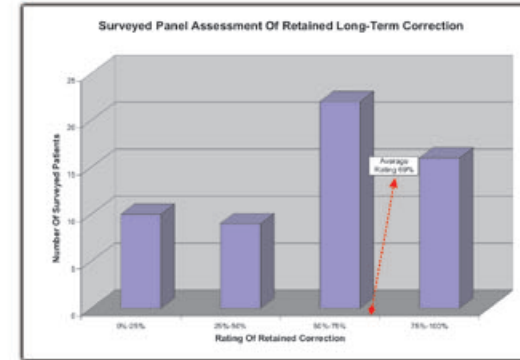


Figure 4

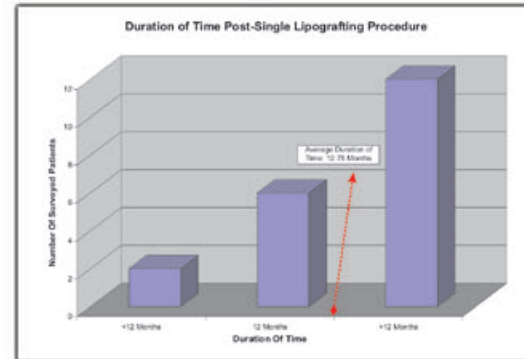


Figure 2

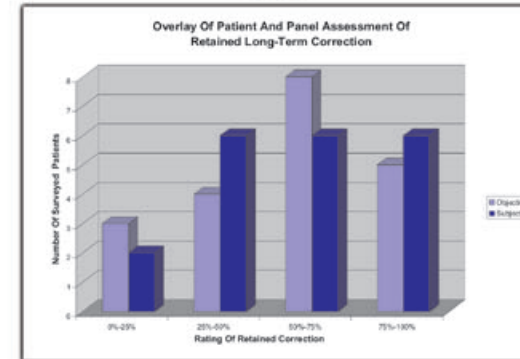


Figure 5

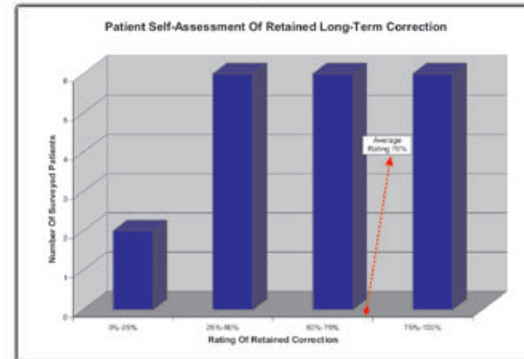


Figure 3

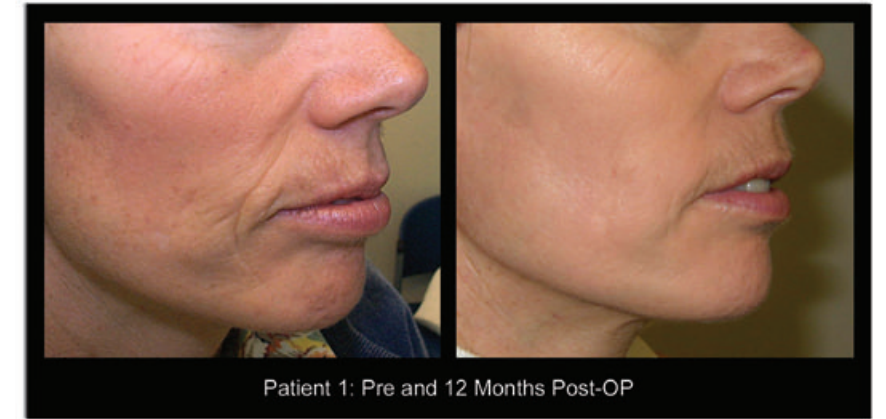


Figure 6



Figure 7