Liposculpture as a complementary treatment in rhytidoplasty

A lipoescultura como tratamento complementar na ritidoplastia

ABSTRACT

Introduction: Multiple approaches and the use of different surgical strategies seem to contribute to the goal of obtaining more satisfactory outcomes in rhytidoplasty. In light of this, liposculpture has been progressively becoming more relevant as an alternative to improve those outcomes, adding greater final aesthetic value to the procedure.

Objectives: To evaluate outcomes obtained in patients who underwent the association of rhytidoplasty and facial liposculpture.

Methods: Fourteen patients underwent classical Pitanguy rhytidectomy associated with liposuction in specific areas of the face, having been subsequently followed up for 12 months. Seventeen volunteers used the Antell & Orseck method to evaluate the postoperative outcomes.

Results: Of the 14 patients evaluated, 9 (64.2%) were classified as having experienced excellent outcomes, while 3 (21.4%) had moderate outcomes, and 2 (14.2%) had poor outcomes. None of the patients experienced outcomes rated as perfect or undesirable.

Conclusions: Rhytidoplasty associated with facial liposculpture is an important alternative for the treatment of facial aging, leading to satisfactory, safe and long lasting results.

Keywords: Cervicoplasty; Rejuvenation; Rhytidoplasty

RESUMO

Introdução: As múltiplas abordagens e a utilização de diferentes estratégias cirúrgicas contribuem para a obtenção de resultados mais agradáveis nas ritidoplastias. Nesse cenário, a lipoescultura vem ganhando cada vez mais relevância como alternativa para potencializar esses resultados, agregando maior valor estético final para o procedimento.

Objetivos: Avaliar os resultados obtidos em pacientes submetidas à associação de ritidoplastia e lipoescultura facial.

Métodos: Quatorze pacientes foram submetidas à ritidoplastia clássica de Pitanguy, associada à lipoescultura em áreas específicas da face, sendo acompanhadas por 12 meses. Os resultados pós-operatórios foram avaliados por 17 voluntários utilizando o método de Antell & Orseck.

Resultados: Das 14 pacientes avaliadas, nove (64,2%) tiveram o resultado classificado como excelente, três (21,4%) como moderado e dois (14,2%) como fraco. Nenhuma paciente obteve resultados classificados como perfeito ou ruim.

Conclusões: A ritidoplastia associada à lipoescultura da face se valida como alternativa importante para o tratamento do envelhecimento facial, proporcionando a obtenção de resultados agradáveis, seguros e duradouros.

Palavras-chave: Cervicoplastia; Rejuvenescimento; Rhytidoplasty
INTRODUCTION

Treatment of facial ageing is among the conditions that prompts patients to seek aesthetic procedures. The demand for new methods aims to fulfill patient’s expectations who still seek complementary procedures after complex surgeries for facial rejuvenation, particularly to overcome loss of volume in certain areas of the face.

Many studies have been trying to understand the real factors involved in the process of facial ageing, offering theoretical support for technical alternatives to be developed. It is believed that facial ageing is the result of a sum of multiple factors, with emphasis on bone resorption and remodeling, relaxation and degeneration of soft tissues and atrophy of the subcutaneous tissue.

The description of facial anatomical compartments and the new understanding of their relevance for rejuvenation surgery favored the association of liposculpture as a complementary treatment in rhytidoplasties. This combination boosted results and made possible a customization of the technique for each case. The results, progressively more satisfactory, made the number of professionals using the technique increase considerably over the last years.

The aim of this study is to present the experience of the authors with the association of liposculpture to rhytidoplasties and discuss the quality of the results and advantages of the procedure.

METHODS

This study was conducted in a template of original article, for which theoretical-practical approaches were used, that aimed at achieving conclusive and significant results. A descriptive, prospective study, in which a sample of 14 female patients were followed-up for 12 months, after rhytidoplasty with facial liposuction (cervical region and lower third of the face) and fat insertion on specific areas. The procedures were performed in the authors’ private practices, from January 2013 to March 2016. There was no comparison between the individuals in the sample, with the results obtained with the evaluation of each separately. This study was conducted according to ethical guidelines of the declaration of Helsinki.

A predefined sequence of standard photographs was produced preoperatively, taken by the same photographer, at the same place and with the same image characteristics (Nikon Inc digital camera, Melville, New York).

Surgery was performed according to the classical methodology detailed in a previous study by the authors, and liposculpture was then associated with the goal of maximizing results. With the patient sedated, we performed anesthesia in the cervical-facial region with approximately 350ml of a solution containing 0.125% lidocaine with adrenaline 1:200,000. We performed liposuction of the cervical region and then cervicoplasty. Before performing Pitanguy's roundlifting, we performed liposuction of the lower third of the face, observing the needs for each case (Figure 1).

The fat collected during liposuction was set aside for sedimentation. After finishing the rhytidoplasty, the fat already washed and prepared using Maricevich et al. technique (Figure 2) was injected into specific areas of the face, as shown in figures 3 and 4.

After the procedures, the patients were seen weekly, and then bimonthly until the 12th month, when new photographs were taken (in identical conditions to before the surgery).

Evaluation was made based on classical principles, modified by Antell & Orseck’s method. In this analysis resource, the patients included in the study were evaluated subjectively with no defined anatomical patterns or references. The 17 volunteers (non-physicians) analyzed the before and after the surgery photographs of the individual in the sample and, according to their own personal opinion, graded each patient. The grades were attributed in the following fashion: 1 point = no improvement; 2 points = mild improvement; 3 points = moderate improvement; 4 points = marked improvement (excellent); and 5 points = perfect. Each patient’s grades were summed and the results classified the outcome as: poor (17-27 points); weak (28-43 points); moderate (44-57 points); excellent (58-77 points); and perfect (78-85 points).

RESULTS

In the period of the study, 14 female, white patients, with a mean age of 55±9 years underwent the procedure described. The surgical procedure lasted on average 234±33 minutes. No difficulty in performing the association of techniques was
found. All patients were discharged around 24 after the surgery. Post-operatory recovery occurred as expected, with only one patient developing hematoma that required drainage in operation room. All other patients evolved with no complications.

The results related to the patients’ assessment (final grades and classification) are shown in table 1. Nine patients (64.2%) achieved an excellent result, three (21.4%), moderate and two (14.2%), weak. There were no results classified as poor or perfect. In figures 5 and 6 the patients who underwent the procedures are represented (pre- and 12-month post-operatory photographs, frontal and left and right profile views).

**DISCUSSION**

The emphasis of facial rejuvenation procedures is still in the maintenance of results long-term, and in the minimization of the stigmatized face. The quest for facial harmony, preserving or reaching anatomical aspects considered to be ideal is still a great challenge for surgeons performing rhytidoplasty. The association of liposuction in this procedure deals with this aspect and offers possibilities that were not routinely obtained with the classical technique.9,10

Currently, facial liposculpture figures as an excellent alternative to guarantee superior results in the surgical approach of the face, be it repairing or aesthetic.4,5 Liposuction of the lower third of the face and cervical region enables achieving a more triangular face, a desirable feature, particularly in rejuvenation surgery.6 The possibility of sculpting with liposuction of specific amounts of certain regions of the face makes it possible to customize the final aesthetic effects, minimizing the unwanted uniformity of results.2

Many authors widely discussed the qualities of the fat as an adjuvant in facial surgery: it is an excellent subdermal filler, with low rates of complications and low cost.9,10 Because the fat carries stem cells, it has an important role in facial rejuvenation, being considered lately by many authors the gold standard choice.11

However, unfortunately, in many situations fat injection does not feature as the sole and definitive procedure, not being possible to establish with accuracy the level of integration between the content injected and the final result of the procedure.12,13 Thus, after the procedure is finalized, new interventions might be necessary to reach the optimal volume for a certain patient.4,10,14

The evaluation of a plastic surgery result reveals difficulties and the tools available have been questioned by different authors for years.15 Until today, there is no one analysis method of the late results in rhytidoplasty considered to be perfect.13,15,17
Antel & Orseck’s method, here used, is one of the most described resources in the literature and is used by most authors. It is characterized by fast application, adequate understanding, being very practical and having reliable results, regardless of the assessor’s characteristics. These qualities were shown again in our study and the little variation in the grading of each assessor for each patient confirms this.

In the scope of plastic surgery, tactical, methodological and material innovations are frequent. The universe of rhytidoplasty is not different and requires continuous updating of the professionals in the area. Many different techniques continue to be published, and a current trend of international articles is to value ancillary strategy in the trans- and post-operative periods. Among those, fat insertion has been proven to be an alternative that is effective, long-lasting and yields excellent results, positioned as a very interesting option for surgeons. Other volumizers still frequently used are usually absorbable and have a high cost, making it difficult to be used widely and accepted by the patients.

The high result indexes characterized as excellent in our study demonstrate that the technique described can contribute to obtaining a pleasant, natural and harmonic post-operative outcome.

**CONCLUSION**

Liposculpture complementary to rhytidoplasty provided satisfactory results, with a simple technique and low rates of complications. Although more studies about this alternative are needed, particularly on long-term maintenance of results, it is more and more validated as an effective option in facial rejuvenation surgeries.
REFERENCES


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