

Procedures

Lip filler with hyaluronic acid - Light Lips Technique

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Abstract

The lips and perioral region play an important role in facial aesthetics. Aging induces a loss of volume and contour of the lips, a flattening of the cupid's bow, and the appearance of perilabial wrinkles. Thus, aesthetic procedures are common in this area because fillers can reduce these alterations, improving facial harmony. Although the application of the fillers is based on some systematized framework, undesirable results could occur. The Light Lips Technique is a method that applies a very small amount of small-particle hyaluronic acid, only 0.4 ml, to six specific points of the lips. The objective of the technique is to provide lifting of the labial commissures, highlighting some labial points, such as the Glogau-Klein points of the cupid's bow and its equivalent points on the lower lip. After the application of this technique, it is possible to observe an improvement of the lips with very natural-looking results.

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Introduction

Overall, the lips and the perioral region are very relevant for facial aesthetics, contributing to the communication of human emotions. Although the beautiful and youthful appearance of the lips is subjective and cultural, some features please and attract most people. These characteristics include lip shape, a well-defined cupid's bow and labial contours, lip volume, straight or slightly elevated commissures, and an ideal distance between the upper lip vermillion apex and the nasal base [1,2].

During the natural aging process, the lips elongate, lose volume and contour, the cupid's bow flattens, commissures suffer deflation and perilabial wrinkles appear. This occurs due to loss of extracellular matrix, elastin, collagen, and subcutaneous tissue, muscle sagging, and bone resorption [3].

Despite the fundamental need for individualization of treatments, considering different facial structures, it is also important that lip filler techniques are somehow systematized, to be safe and reach the desired aesthetic objectives.

This article aims to describe the "Light Lips" Technique, a method of lip filling with a small volume of hyaluronic acid.

Technique description (Figure 2)

In the illustrated cases, small particle hyaluronic acid was used (20 mg/ml - OBT® technology, Restylane Kysse® - Galderma, Uppsala, Sweden), only 0.4 ml, at six distinct

points (Figure 1): right and left commissures, with the aim of elevating them, G and K points (Glogau-Klein) of the cupid's bow and its equivalent points on the lower lip. Restylane Kysse® is flexible and firm, and provides good tissue integration and a natural appearance, in an area with a lot of movement, such as the lips. For younger patients, with thicker

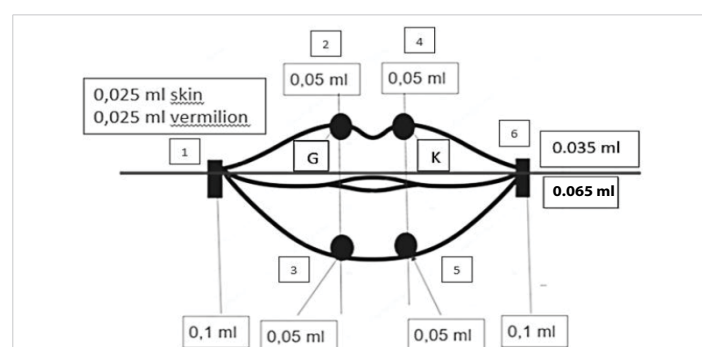


Figure 1: Schematic demonstration of Light Lips Technique and volumes applied on each part of the lip.



Figure 2: Light Lips Technique injection demonstration.

skin and good bone support, Restylane Lidocaine® (NASHA®) technology would also be indicated, which is even firmer and resistant to deformation forces. Some studies have shown that the application of hyaluronic acid on the lip could last up to one year [4,5]. The literature shows that the risk of allergic reactions with hyaluronic acid is very low [6-8].

Before the procedure, it is important to check the use of anticoagulants, due to the risk of ecchymosis and bruises, to ask the patients about previous or actual infections at the site and the history of cold sores. In these cases, it is important to use antiviral prophylaxis. Previous filler applications and/or the use of permanent products at the application site could entail a risk of complications, thus the patients should be asked about this as well.

Before the procedure, the lips should be anesthetized with a topical anesthetic cream composed of 10% lidocaine and prilocaine 3.5% for 30 minutes. After this, the anesthetic cream must be removed, and the asepsis performed with a 2% chlorhexidine alcohol solution.

With a 4-mm 30-gauge needle, precise placement of the product into the dermis or subcutaneous layer turns the procedure safer. Also, lower pressure is needed to extrude the filler, optimizing the patient's comfort [9]. This technique aims to increase the safety and predictability of lip augmentation with HA fillers.

The hyaluronic acid should be injected into these six points (Figure 2).

Right and left lip commissures: intradermal plane at each lip corner, 0.1 ml of hyaluronic acid (Restylane® or Restylane Kysse® - Q-Med AB/Galderma, Uppsala, Sweden). This volume should be injected as 0.035 ml superiorly, and 0.065 ml inferiorly to the lip cleft.

The next points are accessed from the vermilion of the upper lip, in the upper direction, to meet points G and K, where 0.05 ml is applied on each side, being 0.025 ml inside the vermilion and 0.025 ml on the skin just above these points.

Finally, the last two sites of application are accessed from the infralabial skin, towards the vermilion, where a perpendicular imaginary line is formed through the points applied to the upper lip. In the intersection of vermilion and the infralabial skin, 0.05 ml should be applied, on each side, but only on the vermilion.

It is important to be careful if a grayish color appears, indicating that the needle is too shallow, which can cause the Tyndall effect [10]. The loss of resistance, on the other hand, may indicate a deepening of the application plan to the subcutaneous cellular tissue.

The most common side effects are ecchymosis, edema, and pain, which usually disappear after 7-10 days, on average. In

these cases, ice packs should be applied on the site, beyond sun protection and corrective makeup. The region should not be massaged after application.

Figure 3 shows lips before and after seven days of treatment. The lips are presented with rectified commissures, volume and contours restored, and a more youthful appearance.



Figure 3: Comparison of lip volume and contour before and seven days after application.

Discussion

Procedures to increase the volume of the lips have been much sought after in recent years. Although the lips can be treated and their aesthetic improvement brings a more jovial appearance, this is one of the treatment areas that cause more concern for patients of all ages because of the fear of unaesthetic and/or artificial-looking results, and they usually decide not to treat their lips.

The "Light Lips" Technique's advantages are:

1. Promotes lip eversion, a delicate central lip projection, and volumization, and reduces the distance between the nose and upper lip. Not filling the entire length of columns of the philtrum, which often becomes unaesthetic, but only its parts close to the G and K points. the ideal distance between the columella and the upper lip vermilion is between 8-12 mm. This distance tends to increase with aging and can be restored with the "Light Lips" Technique...The G and K Points could be injected through supralabial skin, as an alternative, which could be less painful but also less precise. In addition, there is the elevation of the labial commissures. All of this promotes natural lip rejuvenation and beauty.
2. It presents the possibility of using a few injection points, consequently reducing pain.
3. The use of very low volumes of hyaluronic acid - only 0.4 ml, in six different points is quite economical. It presents visible results with optimal use of the product, and a good cost-benefit ratio.

Who can benefit from the Light Lips Technique?

Both genders, because the favorable lip proportions, like the distance between the columella and superior and inferior vermilion, are relatively similar in men and women [11,12].

A study with 908 caucasian women showed that the ideal ratio of the height of the upper lip vermillion and the upper vermillion skin is 1:1.2 to 2.3 [13,14].

In addition, this technique applies to various age groups, which may have different concerns about the lip region.

In young patients, who prioritize well-defined voluminous and shapely lips, and often do not require much volumization, this technique is useful to highlight points in the central third of the lips.

In middle-aged patients, the "Light Lips" technique can complement other techniques of contouring, lip eversion, and volumization, correcting the down position of the commissures and also highlighting points in the central third of the lips.

In elderly patients, lip aging occurs due to bone resorption, labial collapse, loss of muscle tone, subcutaneous tissue, and dermal density loss. These changes cause labial collapse, increased distance between the nasal base and upper vermillion (from 12-15 mm to 18-20 mm [6], perioral wrinkles, dehydration, thinning and lateral elongation of the vermillion, flattening of the philtrum, loss of cupid's bow definition and lip contour, loss of lip projection, and deflation of the commissures with the appearance of marionette lines [15-17] to recover their elasticity with filler injection. A larger amount of hyaluronic acid is not indicated for very atrophic lips as this may lead to a "heavy" appearance. In addition, it is a delicate area, where any excess product injected, or an incorrect injection technique may cause unaesthetic results. So, in this group, the "Light Lips" Technique can be used for a delicate and slight improvement of the lips, using a small amount of product. With the increased distance between the nasal base and the upper vermillion in older patients, it may be inappropriate to redo the philtrum columns, since the philtrum may become very visible and unsightly [3]. This technique could improve exactly the beginning of the philtrum columns, near the vermillion, giving a more natural appearance.

Among the main points of the technique described in this article is the volume used in the procedure, which is much lower than with other techniques. The smaller volume brings many advantages, such as the lower risk of extrinsic obstruction of the vessels adjacent to the application, less pain, and lower costs with the procedure, enabling access to more people. On the other hand, if only this volume is used, the duration of the effect can be lower, due because of the degradation of hyaluronic acid by hyaluronidase. Patients should be advised of that possibility.

The most frequent sites of the upper and inferior labial arteries are the submucosal plane (58.5%), intramuscular plane 36.2%), and subcutaneous plane (5.3%) [18]. These results were confirmed by ultrasound analysis that showed that the superior labial artery is at 5.6 ± 0.13 mm from the

surface, while the inferior labial artery is less than 5.2 ± 0.14 mm, both located on the vermillion, in the upper lip in 83% of cases and in the lower lip in 86.2% of cases. In the midline, the arteries are in the vermillion in 100% of cases. This study indicates that volumization in superficial planes is safe [19]. Regarding the safety of the injection of commissures, the facial arteries usually are 15 mm laterally to the lip and 11 mm depth in the skin. Therefore, once again the injection by the "Light Lips" technique is predicted to be safe, being far from these arteries [20].

Despite this, it is important to pay attention to changes in the color of the application region, which may indicate that the application is too superficial and causes the Tyndall effect. The loss of resistance, on the other hand, may indicate a deepening of the application plane to the subcutaneous cellular tissue.

In summary, this technique allows the injection of a minimal amount of hyaluronic acid into the lips presenting an optimized alternative for lip enhancement with a natural look and at a lower cost.

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