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LIP LIFTING – A CASE REPORT

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Abstract: The oral cavity is considered one of the most striking features of a face. The upper lip, in particular, can draw even more attention when aged, as it loses its elasticity and falls a little more over the teeth, leaving the smile with a senile appearance. For the correction of this, some aesthetic procedures can be considered and, among them, the lip lift stands out. The following work aims to present a case report where the patient, dissatisfied with her aged-looking smile, sought a solution in lip lifting even after performing a clinical crown increase and lip micropigmentation. Using the Bullhorn technique, it was possible to considerably reduce the measurement of the patient's philtrum, adapting it to the defined aesthetic parameters of ideal height for the upper lip. The result was very satisfactory, with a minimal scar covered by the natural fold of the wing and nasal columella.

Keywords: Mouth. Aesthetics. Lip. Dentistry.

INTRODUCTION

When we talk about facial beauty, we cannot fail to highlight how important are the correct proportions for a fluid rhythm and beauty (RICKETTS, 1982). If we add this to a pleasant oral aesthetic, we can see the great impact that good appearance has on someone's quality of life (MATHIS et al., 2018).

Studies indicate that it is possible to achieve excellent aesthetics from the golden ratio and Fibonacci series (NEGRUȚIU et al., 2019; RICKETTS, 1982) and, as complemented by Holdaway (1983), any maxillo-dental correction is capable of altering the appearance of the face. The oral cavity is considered one of the most striking features on our face, including the lips, especially the upper lip, which, when exhibiting a correct facial proportion, can greatly maximize the beauty of a smile (NEGRUȚIU et al., 2019)

It is natural that, as a person ages, due to the loss of skin elasticity, the upper lip drops

with a narrowing of the vermilion and the lip philtrums become flattened, increasing the vertical height and covering the teeth more both at rest and during a smile (CARDIM et al., 2011; AUSTIN, 1985). Weston et al. (2009) states that, no matter how much other facial rejuvenation approaches are applied, lips that still show signs of aging are always capable of leaving the face with a senile appearance.

Lips are an extremely important component of facial aesthetics and their appearance largely determines how beautiful and attractive a face is. Full, symmetrical lips have been considered attractive by everyone since very early in history, associated with beauty and youth. Cosmetic procedures and surgeries to improve the appearance of the lips have become increasingly popular because of this, especially in the case of the upper lip (KAR et al., 2017; VARDIMON et al., 2020).

Among the aesthetic treatments proposed to solve the lip with an aged appearance, there is the lip lift, or lip lifting, where there is a surgical shortening of the upper lip, increasing the exposure of the vermilion and anterior teeth (CARDIM et al., 2011).

Lip lifting has been performed for 4 decades (TALEI, 2019) and the bull horn subnasal lip lifting technique described by Cardoso and Sperli (1971) was one of the first to be accepted. In it, a small strip of skin and muscle is extracted immediately below the nasolabial junction, contouring it so that, in the end, the design of the incision resembles bull horns. This way, as the gap is sutured, the upper lip rises in relation to the incisal edge of the upper anterior teeth, enhancing the vermilion, exposing the teeth and providing a much more youthful aspect (PERENACK, 2005).

The following study aimed to report a successful case of lip lifting performed using the bull horn technique in a patient whose objective was to rejuvenate her facial features.

CASE REPORT

Female patient, 57 years old, sought dental care complaining about the lack of youthfulness in her smile. No upper incisal exposure at rest and little exposure when smiling. She also reported her dissatisfaction with the thickness of the vermilion on her lip, having performed a micropigmentation procedure to increase the height of the vermilion in an attempt to improve her appearance three years earlier.

She had also just undergone an oral rehabilitation, with 10 single metal-ceramic elements being made and, after several mock-up and porcelain tests, the patient opted for the tooth the size she was.

After the facial aesthetic evaluation, it was defined that the size and width of the teeth were proportional to the patient's face, however, she showed an excess of white upper lip (filter) and little exposure of vermilion due to the natural aging process (figure 1).



Figure 1 — Preoperative patient's lips.

First, the patient was medicated with an attack dose of Cephalexin 2g preoperatively. Still preceding the procedure, points were marked at the base of the nose from one wing to the other, meeting at the midpoint of the columellar base. With these points defined, the length of the philtrum (subnasal distance to the beginning of the vermilion) and the visible height of the upper vermilion (the distance between the beginning of the

vermilion and the stomium) were measured. This is to define the exact amount of tissue to be excised.

Upon evaluation with a digital caliper, the patient had a philtrum height of 16 mm and 26 mm from the columella to the stomium. For the new measurement of the filter, it was decided to shorten it by 4 mm using the Bullhorn technique to highlight the cupid's bow, as required by the patient.

The preoperative design was drawn to resemble an ox horn with the upper border immediately below the columellar base, going from one lateral wing to the other. The lower edge followed the same stroke pattern, however, 4 mm lower, outlining the amount of tissue that would be discarded (Figure 02).



Figure 02 — preoperative drawing.

A pinch test was performed in front of a mirror so that the patient could visualize the potential result. She was warned about possible complications and, once agreed, the procedure itself began.

The patient was given local anesthesia using 3% mepivacaine (Mepicain) as anesthetic. The incision was made according to the preoperative design with a 15 blade entering through the curve of the nasal ala. The blade was directed perpendicular to the skin. Immediately afterwards, an incision was made starting from the midline of the lower edge of the preoperative drawing to the lateral alar groove of the nose until it met the previously

created upper edge incision. This was done on both the left and right sides (Figure 3).



Figure 3 — skin strip excision.

Excision of the skin immediately below the columellar base following the previously designed pattern so that there is a survey of the entire area of the upper lip, however, with central emphasis for greater highlighting of the patient's Cupid's bow and better incisal exposure.

Finally, the strip of skin, subcutaneous tissue and muscle surface was excised (Figure 4). The amount of 4 mm excision varied very slightly according to the degree of philtrum shortening and the horizontal asymmetry of the upper lip (Figure 5). Closure was performed in two planes: the deeper one with continuous subcutaneous suture using 5-0 Vicryl polyglactin (Ethicon) absorbable sutures and, on the outside, simple stitches with 5-0 mononylon (Ethicon).



Figure 4 — Strip of excised tissue.



Figure 5 — Surgical crease.

The operative crease created was 4 mm with very little variation in measurement.

In the immediate postoperative period, an excellent and very promising result was already observed (Figure 6). The patient was properly instructed regarding postoperative care, and it was recommended that she not use any cosmetics or sunscreen in the region and that she avoid exposure to the sun. He was also asked to use Vimovo 500mg/20mg at intervals of 24 hours for three days and to return in 10 days for the removal of the stitches.



Figure 6 — immediate postoperative.

Closing in two planes allows for a firmer suture capable of lifting and sustaining the tissue in the deeper plane and smoother healing in the superficial plane. The immediate lip lift is notable, as is the incisal exposure, contributing to the more youthful appearance of the patient's mouth.

Fifteen days later, the final results were excellent and the patient was very satisfied (Figures 7 and 8). Their new measurements were recorded: philtrum height 12 mm and total upper lip height 22 mm (columella to stomion).



Figure 7 and 8 — Postoperative 15 days later.

The healing of the patient is very satisfactory after 15 days. There is incisal exposure both at rest and with the lips open, leaving a much younger appearance, as required by the patient. This clinical case report describes the lip lift treatment.

DISCUSSION

Observing not only the literature, but also popular opinion, it is clear how much the lips are capable of dictating the attractiveness of the face, being of great importance for the perception of beauty (KAR et al., 2017).

Increasingly, the search for procedures that maintain a youthful appearance becomes

more common (PERENACK, 2005). Especially on the face. It is customary that there is an association of more than one procedure for a more extensive rejuvenation of the face (WESTON et al., 2009), however, the most striking and key characteristic of the success of the treatment is, generally, the smile and all the aesthetic elements present in it (VARDIMON et al., 2020). Nowadays, the appearance of the eyes and mouth are taken into account before any other feature and the upper lip, in particular, can have an absurd influence on the appearance of the smile (NEGRUȚIU et al., 2019).

It becomes important to treat evidence of oral aging not only through dental implants and ideal restorations, but also by correcting the soft tissue architecture that shapes these outcomes (PERENACK, 2005). In the past, little attention was paid to the aging of this region. With the advancement of surgical techniques and knowledge gain about the perioral region, minimally invasive and low-risk alternatives began to be developed and put into practice (SURYADEVARA, 2008).

The use of botulinum toxin for chemodenervation in and around the lips has been widely discussed and implemented for a more youthful appearance (SURYADEVARA, 2008; BAUDOIN et al., 2018). Low doses are used for application in two to four points on the border between the vermilion and the white lip, hoping that it will smooth out the perioral wrinkles (barcode lip) and cause a slight lift of the vermilion (BAUDOIN et al., 2018). However, it is not always a good long-term option if you take into account its need for reapplication, in addition to the risk of paresthesia and reactions.

Another very widespread option is soft tissue filling to replace the loss of volume in the deep nasolabial folds and increase the lips, seeking to make them thicker. The substance used in these cases will be chosen based on

the desired result, application site and patient and professional comfort. Complications in these cases are rare, however, common with the use of older and more permanent products (SURYADEVARA, 2008).

The lip lifting procedure is one of the most effective tools to recover and maintain the youthfulness of the perioral region by reducing the area of the white lip and exposing more of the red lip (CARDIM et al., 2011; SURYADEVARA, 2008). For several years, especially in western countries, lifting only the central third of the lip was recommended in the lip lifting procedure, leaving the bullhorn subnasal lip lifting described by Austin as an option for patients whose upper lip was longer (LEE et al., 2015; AUSTIN, 1985). However, the exclusive elevation of the central portion of the upper lip can bring a sad aspect to the lips, since the region of the labial commissures can appear inclined downwards, characterizing a phenomenon called by Austin (1992) as “deformity”, a sad appearance. The bullhorn technique, or bull horn, can easily avoid this deformity.

Variants of lip lifting have been developed since their first description in the literature, such as the double duck incision technique described by Cardim et al. (2011) in which the design of the incision runs through the nasal floor and deviates from the columella, surrounding the insertion of the nasal alae. Although this technique seeks to minimize the appearance of the postoperative scar as much as possible, it is worth mentioning that the incisional scar usually remains hidden under the natural fold of the nasolabial junction and in the lateral grooves of the ala of the nostril. This fact alone does not cause discomfort in the patient who seeks lip lifting and even more exposed scars, such as those produced by open rhinoplasty, are very well accepted (CARDIM et al., 2011, BAUDOIN et al., 2018).

CONCLUSION

The patient’s main complaint about her senile lip was resolved and she is very satisfied with the result. Healing was excellent and there were no trans and postoperative complications.

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