
Lip lift: smile rejuvenation and reshaping

Lip lift: rejuvenescimento e remodelação do sorriso

Carlos Sanches Vargas Junior

ORCID: <https://orcid.org/0000-0002-8243-4149>

Institute Alexandre Ponte (IAP), Parapuã – SP, Brazil

E-mail: contato@carlossanches.com

Rachel Gomes Eleutério

ORCID: <https://orcid.org/0000-0001-8005-9480>

Dentistry School, University of Marília (UNIMAR) – Marília – SP, Brazil

E-mail: rachel.ge@hotmail.com

Beatriz Flávia de Moraes Trazzi

ORCID: <https://orcid.org/0009-0000-7826-0441>

Dentistry School, University of Marília (UNIMAR) – Marília – SP, Brazil

E-mail: flavia.odonto@unimar.br

Daniela Vieira Buchaim

ORCID: <https://orcid.org/0000-0002-9914-1262>

Dentistry School, University of Marília (UNIMAR) – Marília – SP, Brazil

Postgraduate Program in Structural and Functional Interactions in Rehabilitation, University of Marília (UNIMAR) – Marília – SP, Brazil

Medical School, University Center of Adamantina (UniFAI) – Adamantina – SP, Brazil

Graduate Program in Anatomy of Domestic and Wild Animals, Faculty of Veterinary Medicine and Animal Science, University of São Paulo (FMVZ/USP) – São Paulo, Brazil

E-mail: danibuchaim@alumni.usp.br

Rogério Leone Buchaim

ORCID: <https://orcid.org/0000-0002-5881-2218>

Department of Biological Sciences, Bauru School of Dentistry, University of São Paulo – Bauru – SP, Brazil

Graduate Program in Anatomy of Domestic and Wild Animals, Faculty of Veterinary Medicine and Animal Science, University of São Paulo (FMVZ/USP) – São Paulo, Brazil

E-mail: rogerio@fob.usp.br

Eliana de Souza Bastos Mazuqueli Pereira

ORCID: <https://orcid.org/0000-0003-4104-0490>

Dentistry School, University of Marília (UNIMAR) – Marília – SP, Brazil

Postgraduate Program in Structural and Functional Interactions in Rehabilitation, University of Marília (UNIMAR) – Marília – SP, Brazil

E-mail: elianabastos@unimar.br

RESUMO

Atualmente há uma demanda crescente de procedimentos para tratamento estético facial e o conhecimento das proporções entre estruturas anatômicas do rosto é a chave para o planejamento estético. O processo de envelhecimento, agravado pelo efeito gravitacional, bem como diferenças raciais, causam variações nessas proporções; ao longo do tempo, alterações ocorrem no plano ósseo, na disposição do tecido gorduroso, nas fibras musculares e na pele, trazendo modificações importantes na porção subnasal do lábio superior. Uma das alternativas de tratamento para rejuvenescimento facial é o procedimento de *lip lift*, uma cirurgia estético-funcional para reposicionamento do lábio superior que proporciona um melhor contorno e volume labial, exposição adequada dos dentes e um sorriso mais harmônico. Esse trabalho mostra um caso clínico de uma paciente jovem, gênero feminino, insatisfeita com a estética facial, devido à presença de lábio superior fino e pouca exposição dos seus dentes anteriores superiores durante o sorriso. Com adequado planejamento, a paciente foi submetida ao procedimento de *lip lift*, que contribuiu para o rejuvenescimento desse segmento facial, recuperando a anatomia labial e devolvendo autoestima e jovialidade à paciente.

Palavras-chave: Lábio; Rejuvenescimento; Estética; Sorriso.

ABSTRACT

Currently, there is a growing demand for procedures for facial esthetic treatment, and knowledge on the proportions between facial anatomical structures is the key to esthetic planning. The aging process, worsened by the effect of gravity, as well as ethnic differences, causes variations in these proportions; over time, there are changes in bones, arrangement of fat tissue, muscle fibers and in the skin, causing important changes in the subnasal portion of the upper lip. One of the treatment options for facial rejuvenation is the lip lift procedure, an esthetic-functional surgery for upper lip repositioning that provides better contour and lip volume, adequate exposure of teeth and a more harmonious smile. This paper shows a clinical case of a young female patient, dissatisfied with her facial esthetics, due to the presence of a thin upper lip and little exposure of maxillary anterior teeth during smile. With proper planning, the patient underwent a lip lift procedure, which contributed to rejuvenation of this facial segment, recovering the lip anatomy and restoring the patient's self-esteem and youthfulness.

Keywords: Lip; Rejuvenation; Esthetics; Smile.

INTRODUCTION

The parameters of beauty and facial attractiveness have considerable influence on the population, since the esthetic standards are seen as important factors for social acceptance. KAR et al. (2018) defined beauty as “a state of harmony” – a balance of facial proportions, a balanced relationship between skeletal structures, teeth and soft tissues.

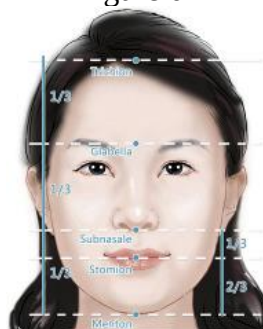
The face has a special contribution to the individual's personality, self-perception and social interactions. The eyes, nose and lips, with their central position, catch the observer's attention and have particular interest for facial esthetics (REIS et al., 2006; LEE et al., 2015; HEIDKRUGER et al., 2017).

The lips are essential components for facial symmetry and esthetics. Historically, full lips are associated with youth and beauty, especially in women. The esthetic standards vary across cultures; currently, there is a preference for thick, natural-looking lips, proportional to other facial features, with a well-defined red border and balance between the dimensions of the upper and lower lips (LEE et al., 2015; GORDON et al. 2021).

The lips form a transition line between the facial skin and oral mucosa and maybe they are the largest unit of facial mobile expression (WOLLINA, 2013). The upper lip is the upper part of the mouth located under the nasal pyramid. Anatomically, it is divided into two parts: “white lip”, covered with skin; and “red lip” corresponding to the dry and visible part of the oral mucosa. The mucous membrane extends into the mouth in moist mucosa surrounding the orbicularis oris muscle (LANDGRAF et al., 2002; CYR, PREVOT, 2017).

PAN, in 2016, described the division of facial thirds: the lower facial third is divided into 3 thirds; the first (upper) third goes from the subnasal to the minor stomium, and the lower two thirds from the stomium to the chin (Figure 01).

Figure 01



(Source: PAN et al., 2016)

BAUDOIN et al. (2019) also reported that the entire upper lip should represent the upper 1/3 of the lower facial third, while the lower lip (up to the chin) should represent the remaining 2/3.

According to some authors (PERENACK et al., 2006; TONNARD et al., 2019), as individuals age, the perioral region undergoes changes: the upper lip elongates and sinks, covering the upper teeth; the oral commissures fall and the red columns of the lip and philtrum thin, losing the youthful curve.

Facial aging is a complex process that involves several factors, including tissue ptosis, with loss of lip fat and muscle tone (PAIXÃO et al., 2011; MOMMAERTS, BLYTHE, 2016; FEDOK et al., 2019). With aging, worsened by the gravity effect, there is enlargement of the cutaneous portion of the upper lip (increase in the distance between the nasal base and the cutaneous-mucous transition line) and a decrease in thickness. Also, there are blurring of the philtrum, vermilion inversion, loss of incisors exposure and horizontal flattening of the vermilion (SANTANCHE, BONARRIGO, 2004; WALDMAN, 2007; PAIXÃO et al., 2011; LI, RITZ, 2018; TONNARD et al., 2019). Even in young patients, who present a considerable decrease in the amount of visible vermilion on the upper lip, characterizing the appearance of “thin lips”, there is loss of facial esthetics and loss of aspects of youth and sensuality.

There are several treatments (surgical and non-surgical) to reduce the signs of facial aging, which increase the volume, architecture and lip eversion; professionals working in the area must be aware of all of them for the best therapeutic option.

Lip lift surgery is a procedure that can be performed both on older people for facial rejuvenation, correcting the natural drooping of the upper lip, as well as in young people who aim to increase the lip, since lifting the upper lip provides more volume, with greater exposure of upper teeth, restoring the youthful curvature and providing a more harmonious smile (LEE et al., 2015; TALEI, 2019). Lip lift is the most suitable procedure for those who want to permanently correct the height and volume of the lips, avoiding the need for constant applications of lip fillers (MALONEY et al., 2012; LEE et al., 2015).

This paper presents a surgical technique to increase the exposure of the lip vermilion and upper teeth, creating a fuller lip with a more youthful and harmonious smile. With this procedure, we achieve shortening of the skin between the upper lip and

the nasal base, by removing a fragment of skin and pulling it upwards, which causes rotation of the lip volume, projecting and increasing the vermilion.

CASE REPORT

A female patient sought the dental clinic complaining that she did not show much vermilion of the upper lip or teeth when smiling. She also reported that she had seen, on social networks and the media, new options to improve her facial esthetics. A clinical evaluation was performed, as well as a photo session for planning of the case, and the possibility of remodeling of the upper lip region that brought esthetic dissatisfaction to the patient (Figure 02).

Figure 02 – Initial clinical case



For planning of this clinical case, specifically, a dermographic surgical microblading marker and a 6-inch professional digital caliper Dc-6 Western were used.

With the aid of a caliper, the distance from the nasal base to the onset of the lip vermilion (16 mm) was measured (Figure 03).

The patient must be evaluated based on the parameters of facial symmetry and proportionality, whose ideal measure for the nasolabial region is between 13 to 15 millimeters in length. Patients with over 15 mm and little exposure of the incisors can undergo a lip lift. Ideally, the upper lip length should be between 18 and 21 mm (MOMMAERTS, MOERENHOUT, 2011; RIBEIRO-JÚNIOR et al., 2013). The ideal lip length is 20 mm (± 2 mm), with a 1:2 ratio between the lower lip and chin.

In this case, as illustrated in Figure 04, it was planned to remove 5 mm at the upper lip height. The drawing, shaped as a wing, was performed after marking the points with the pen, following the nasal base (Figure 05). Removing these 5mm will provide an effective decrease of around 3mm from the initial 16mm distance. These demarcations are necessary for surgical planning of the area to be excised.

Figure 03 – Planning: measurement of the distance from the nasal base to the onset of the upper lip vermilion.

Figure 04 – Planning: calculation of tissue size to be removed.

Figure 05 – Planning: demarcation of the area to be excised.



Fig. 03

Fig. 04

Fig. 05

Complementary exams were requested from the patient (complete blood count, coagulation tests and fasting blood glucose), which showed results within the normal range, without changes. With the surgical procedure scheduled, the patient received some preoperative guidelines and care: to present on the day of surgery without facial makeup, take the prophylactic medication one hour before the procedure (4 tablets of amoxicillin 500 mg) and fasting for one hour before the procedure.

On the day of lip lift surgery, antisepsis was performed on the patient face with 2% chlorhexidine gel (2% Rohex – Rioquímica) and demarcations were made with a dermatographic marker, as planned. Anesthesia was performed by infraorbital blockage and terminal nerve infiltration in the buccal sulcus between the canines using articaine with vasoconstrictor (DFL), with the aid of a carpule syringe and a short needle (Terumo). Also, 5u of botulinum toxin (Botulift) was applied in four points of the orbicularis oris muscle of the upper lip, aiming at reducing muscle tension, thus avoiding distortion of the suture performed (Figure 06).

Figure 06 – Botulinum toxin application site (Botulift)



The incision was performed with a n. 3 handle and n. 11 scalpel blade; a split flap was performed with a scalpel blade, up to the subcutaneous tissue in the entire previously delimited area. After incision, the tissue was dissected with blunt-tipped scissors, in order to release the flap and simultaneously promote hemostasis. At this stage, there is no need for irrigation with saline, yet care should be taken to avoid fenestrations. After incisions and divulsion of the area of interest, synthesis was performed, respecting the plans of body construction. First, suture was performed with 5-0 Vicryl (Ethicon) in the subcuticular plane (the subcutaneous tissue is placed under the epithelium in a linear line), followed by skin suturing with 6-0 Mononylon (Ethicon) (Figures 07, 08 and 09).

Figures 07, 08 and 09 – Sequence of lip lift procedures.



Fig. 0

Fig. 08

Fig. 09

The patient received postoperative instructions: cleaning with 10 vol. hydrogen peroxide using a cotton swab and application of Cicaplast cream (La Roche-Posay), three times a day for sixty days.

Figures 10 and 11 – Immediate postoperative period after surgery; frontal and lateral views.



Fig. 10.



Fig. 11

The suture was removed after 7 days, allowing better hygiene of the area by the patient, which is of paramount importance for the scar to become more imperceptible (Figures 12, 13 and 14).

Figure 12 – Three days postoperatively

Figure 13 – Three months postoperatively

Figure 14 – Twelve months (01 year) postoperatively



Fig. 12



Fig. 13



Fig. 14

DISCUSSION

The lips play an important role in the esthetic perception of the face. The reasons for dissatisfaction with the lip characteristics of each individual vary from intrinsic causes, such as lips considered small, thin, asymmetrical or disproportionate; changes due to aging; and even external influences, such as the esthetic standards of fashion, media, and celebrities.

To obtain an increase in volume, lift and projection of the lip contour, the procedure of lip filling with substances, such as hyaluronic acid, can be used (RHO et al., 2022). Some advantages of hyaluronic acid include its small invasive degree, easy adaptation to the nasal-oral contours due to its viscosity, which favors good esthetic results and little risk of complications. The disadvantages are the absence of permanent results and durability of approximately nine months. Due to this factor, lip filling performed with hyaluronic acid requires periodic maintenance (CUNHA et al., 2015; RHO et al., 2022). In addition, excessive filler administration to recreate lip volume can cause harmful lip droop and undesirable coverage of the upper incisors (MOMMAERTS, BLYTHE, 2016).

Conversely, surgical lip rejuvenation by shortening the middle third with an incision at the nasal base is simple and definitive. This method reconstitutes the characteristic signs of the young lip, such as exposure of the incisor teeth, and increases the mucosal band, with minimal and imperceptible scarring (PEREIRA FILHO, ELY, 2012). This is an outpatient procedure, performed under local anesthesia, indicated for people with low smile line, who do not expose their teeth at rest.

By correcting cases of patients with a large distance between nose and upper lip with the lip lift procedure, these individuals are provided with a more harmonious appearance with the rest of the face. For this reason, younger patients who have a longer upper lip may largely benefit from this surgery. The lip lift increases the lip vertically, without creating excessive volume (limitation of hyaluronic acid).

CONCLUSION

In the present case, there was gain and improvement in the upper lip contour and volume, restoring the self-esteem and youthfulness to the patient. The importance of the

professional when performing a correct planning, diagnosis and individualized esthetic therapy should be highlighted, respecting the fundamental anatomical aspects of facial anatomy of interest for esthetics. The professional knowledge and technical training, always aiming at good esthetic results and greater safety, are extremely important, also for the management of possible complications.

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