

Systematic Review of Different *Lip Lift* Techniques: Indications, Aesthetic Outcomes, and Complications

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Abstract

The lip lift is an aesthetic surgical procedure that has gained significant popularity in recent years, particularly among patients seeking facial rejuvenation without the need for more invasive interventions. This systematic review aims to critically analyze the main techniques described in the scientific literature, including the subnasal bullhorn, Italian lip lift, corner lip lift, and modified direct lip lift, addressing their indications, aesthetic effectiveness, durability of results, and potential complications. The methodology included searches in databases such as PubMed, Scopus, Web of Science, and LILACS, with inclusion criteria defined for articles published between 2015 and 2025. A total of 21 relevant clinical studies and reviews were selected. The results indicate that the subnasal bullhorn is the most widely used technique, offering good predictability and high patient satisfaction. The corner lip lift is preferred in patients with downturned oral commissures, while the direct technique carries a higher risk of scarring despite allowing precise control of symmetry. Complications include wound dehiscence, asymmetry, and hypertrophic scarring, being more common in open and direct approaches. The choice of technique should consider individual anatomy, the degree of lip ptosis, and patient expectations. It is concluded that the lip lift is safe and effective when properly indicated, with long-lasting results, especially when combined with complementary procedures.

Keywords: Aesthetic surgery; Lip lift; Surgical techniques; Facial rejuvenation; Surgical complications.

Introduction

Facial aging is a complex physiological process that affects all anatomical layers of the face, including the skin, subcutaneous tissue, musculature, and underlying bone structures. One of the most noticeable manifestations of perioral aging is the increased distance between the nasal base and the upper lip, known as philtral elongation, which leads to a loss of dental show at rest and an overall older appearance [1]. Additionally, genetic factors, photoaging, and habits such as smoking exacerbate this condition. In response to this aesthetic demand, the lip lift has emerged as a minimally invasive surgical alternative aimed at reducing philtral height and improving lip proportions. Reported benefits include increased visibility of the upper teeth, enhancement of lip curvature, and overall rejuvenation of the perioral region [2].

Since its initial description, various techniques have been developed to optimize aesthetic outcomes, minimize visible scarring, and tailor the procedure to each patient's anatomical characteristics. The most commonly used methods include the subnasal bullhorn, which conceals the scar at the nasal base; the Italian lip lift, with lateral vertical incisions; the corner lip lift, indicated for patients with downturned oral commissures; and the direct technique, which removes a strip of skin above the vermilion border [4].

Each approach presents specific advantages and limitations. The bullhorn technique is considered the gold standard due to its effectiveness and discreet scar, while the corner lift is reserved for correcting angular depressions. A thorough understanding of the vascular and muscular anatomy of the perioral region is essential to avoid complications such as paresthesia, flap necrosis, and poor wound healing [4]. Despite the growing number of publications on this topic, there is still a lack of systematic reviews that comparatively evaluate the clinical outcomes of different lip lift approaches. This study aims to fill that gap by gathering and critically analyzing the available evidence, providing guidance for plastic surgeons and dermatologists in clinical practice.

Objectives

To systematically analyze the surgical techniques used for lip lift procedures, evaluating their aesthetic outcomes, complication rates, and indication criteria based on scientific literature published between 2015 and 2025.

Materials and Methods

A systematic review was conducted following PRISMA guidelines. The databases used were PubMed, Scopus, Web of Science, and LILACS. The descriptors applied included: “lip lift,” “upper lip shortening surgery,” “perioral rejuvenation,” “lip lifting techniques,” and “aesthetic plastic surgery.”

Discussion

The results of this review show that the subnasal bullhorn lip lift remains the most widely used and studied technique, with high satisfaction rates and a favorable complication profile when performed by experienced surgeons [5]. This approach allows effective shortening of the upper philtrum and significant improvement in dental show, especially in younger patients with good skin tone. The Italian lip lift offers a less visible design and may be a good option for patients concerned with scarring, although the amount of philtral shortening achieved is more limited [6]. The corner lip lift is mainly indicated in patients with downturned oral commissures and may be combined with facelift techniques for more harmonious results.

The direct technique, although it provides objective results and precise symmetry, is still avoided in many centers due to the risk of visible scarring, especially in patients with darker skin types. However, some authors highlight that modern closure

techniques and meticulous handling of tissue trauma can favor better healing [7]. The most commonly reported complications were suture dehiscence, local paresthesia, and unaesthetic scars. Most were considered mild and resolved with conservative treatment. More severe complications, such as flap necrosis and deep infections, were rare (<2%).

It is worth noting that patient selection is a decisive factor. Smokers, patients with healing disorders, or those with unrealistic aesthetic expectations presented worse postoperative outcomes [8]. Additionally, combining the lip lift with other rejuvenation techniques, such as lip fillers or facelifts, has proven beneficial in composite studies, contributing to a more youthful and natural appearance. Therefore, surgical decisions should be individualized, considering anatomical factors, skin type, medical history, and aesthetic expectations. Surgeon experience, refined suture techniques, and careful postoperative follow-up are key determinants for surgical success.

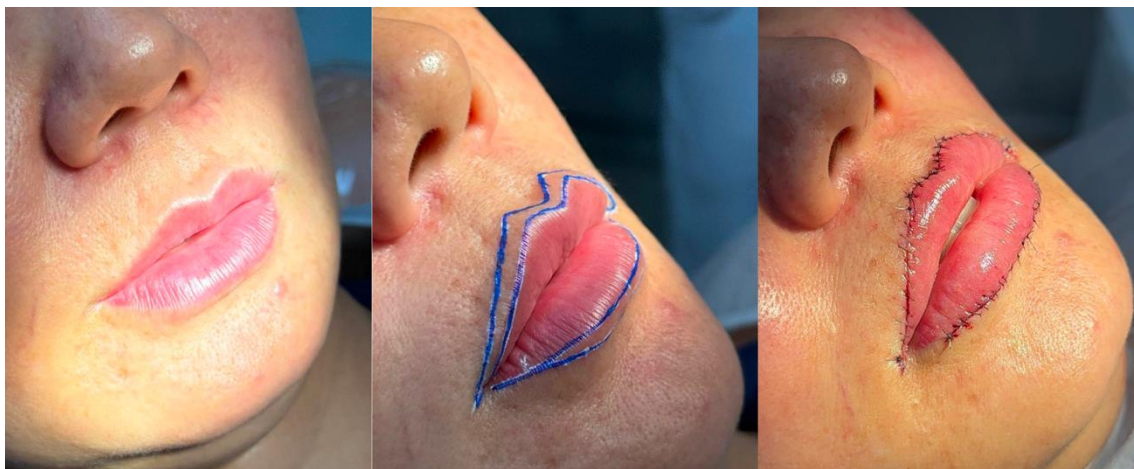


Figure 1: Female patient, 43 years old, presenting with increased distance between the nasal base and upper lip (philtrum). Philtrum measured 17 mm. Preoperative markings of 3 mm were made on the upper and lower lip. A simple suture was performed at the Cupid's bow and a running suture on the lateral regions.

Conclusion

Lip lift surgery represents an effective and safe technique within the scope of modern facial aesthetic surgery, promoting long-lasting results and high patient satisfaction. Techniques vary in complexity and applicability, with the subnasal bullhorn method being the most well-established in the literature due to its balance between aesthetic effectiveness and discreet scarring. The corner lip lift and the Italian lift provide valid alternative approaches for specific cases, while the direct technique, despite its scarring risk, allows detailed control of lip symmetry. Individualizing the choice of technique is essential to optimize outcomes and reduce the likelihood of complications.

Current literature highlights the importance of detailed preoperative analysis, careful patient selection, and meticulous surgical technique. The use of standardized protocols for follow-up and result documentation is still limited, emphasizing the need for prospective studies with larger samples and long-term follow-up. The lip lift is perceived as a versatile and powerful tool in perioral rejuvenation, provided that anatomical principles, appropriate indications, and precise technical execution are respected.

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