The Modified Upper Lip Lift

Advanced Approach with Deep-Plane Release and Secure Suspension: 823-Patient Series

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KEYWORDS

• Modified upper lip lift • Philtrum • Reduction • Shortening • Augmentation

KEY POINTS

- Deep-plane release of the SMAS tissue in the upper lip permits a tension-free suspension to the ligaments at the nasal base.
- Preoperative incision and vector markings provide a map for proper skin redistribution.
- Suspension suturing of the deep lip tissue allows proper, tension-free, healing in a highly dynamic region.
- Immaculate closure is of utmost importance at the nasal base.
- Techniques crossing the nasal sill should be avoided.

INTRODUCTION

The Evolution of Lip Lifting

The upper lip lift has been performed for over 4 decades.[1] The modified upper lip lift takes established principles used elsewhere in facial surgery and applies them to upper lip rejuvenation to obtain superior results. Traditional lip lift techniques have been criticized and often avoided out of the fear of scarring. To avoid problems that can be encountered at the nasal base, surgeons have become increasingly creative with incision design, trying to maximize results and decrease complications. Unfortunately, few of these techniques have provided esthetically natural and reproducible results.

The bullhorn subnasal lip lift was one of the first acceptable techniques, as described in 1971 by Cardoso and Sperli.[1] Several renditions followed with the goal of reducing incision length, limiting scarring and enhancing the amount of lifting.[2–6] Unfortunately, most of these techniques have a tendency toward nasal base effacement and scarring that is difficult to repair according to the author's clinical experience (**Figs. 1–4**).

Our technique is based on the classic bullhorn incision with modifications that have made a significant improvement in results and consistency. Rather than focus on changes in incision design, the key to our procedure is a deeper and more extensive release of the upper lip and more definitive suspension. The modified upper lip lift is a centrally vectored deep-plane advancement flap focused on releasing tension in the skin and uniformly redistributing the skin once tethering is released. The preoperative radial vector markings designed and depicted by the author are essential to optimizing outcomes. We performed 823 upper lip lifts over the 4-year period from 01/01/2015 until

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Fig. 1. Atrophic scarring with nasal effacement following "Italian Lip Lift."

the date of this article 10/31/2018. Review of our results reveals consistent outcomes with few complications when using our technique for the modified upper lip lift.

PATIENT SELECTION

The modifications made to the bullhorn subnasal lip lift technique have allowed a significantly wider application of this procedure. Previously reserved primarily for elderly patients with light skin, this procedure can now be used on patients of a wide variety of ages, skin types, genders, and ethnicities. This procedure can also be used for patients with already adequate tooth show who wish to improve upper lip height, character, and volume. Even the most conservative upper lip lift can change the slope and vector of the vermillion and make the lip more receptive to filler augmentation (**Figs. 5–7**).

The most common presentations and complaints in the author's practice are shown in **Box 1**.

Patients often present with excess lip length and drooping, complaining of looking tired and aged. An elongated upper lip can lengthen the appearance of the entire midface. Lack of tooth show exaggerates the aged appearance and can

Fig. 2. Atrophic scarring with striations after vertical lifting with extended lateral incisions.

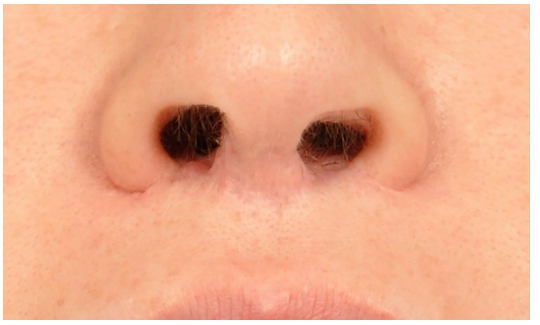

Fig. 3. Effacement of nasal base with labial skin pulled into the nose with loss of sill volume.

dramatically diminish sensuality. As the lip lengthens, it also tends to display diminished function while losing character and definition of the Cupid's bow (**Figs. 8–10**).

In recent years, there has been an emergence of patients suffering the negative effects of fillers. Permanent fillers such as silicone, fat, and other polymers such as polymethylmethacrylate (PMMA) may cause perpetual damage to the upper lip because of expansion, thickening, and effacement. They may also dramatically inhibit lip function through muscular infiltration and/or edema. The upper lip lift cannot restore the lip to a normal state, but it can re-elevate the lip to a higher position with improved eversion and improve overall appearance (**Figs. 11** and **12**).

Temporary injectables such as hyaluronic acid (HLA) dermal fillers may have negative short-term outcomes, as well as permanent sequelae. The most notorious of these fillers to have a problem is Juvderm XC. Due to it being hydrophilic from its high HLA concentration (24 mg/mL) and migratory in nature, it accounts for most problems seen with HLA products in my practice. The tissue integration and migration of this product can cause a spreading out of the filler in the subcutaneous

Fig. 4. Atrophic scarring and hypopigmentation following upper lip lift performed with high tension closure.

Fig. 5. Conservative excision on a patient with adequate tooth show improving lip accents.

tissue of the lip, beyond the vermillion border where it was injected. The author has witnessed the persistence of Juvederm in reactive regions for over 8 years. Given the issues witnessed following injections of Juvederm XC, PMMA, silicone, and other polymers, the author has advised against their use in the lips. Fat injections in the lip may have similar consequences, and fat grafting should not be done without prejudice. These migratory, hydrophilic, and inflammatory fillers are most notably found within the 10-mm segment above the vermillion border months to years following injection (**Figs. 13–16**). They are quite noticeable on most patients, presenting with a bulge, whitish discoloration, simian upper lip convexity, and limitation in smile. Dissolving HLA filler above the vermillion border is easy to do and should be done before pursuing surgical intervention to increase precision and decrease postoperative inflammation.

Another presenting complaint is drooping or lengthening of the upper lip following surgical

Fig. 6. Lip eversion following modified upper lip lift providing improved vermillion vectoring and display.

Fig. 7. Conservative excision improving lip accent and appearance.

procedures such as rhinoplasty or orthognathic surgery. Rhinoplasty can have a clear and direct effect on the position of the upper lip. Maneuvers that deproject the nasal tip, such as transfixion incisions or dissection around the nasal base, can cause the lip to lower immediately or shortly after surgery. This can be prevented, reversed, or improved using a variety of resuspension techniques such as the “tongue-in-groove” maneuver, suspension to the nasal spine, or by performing an upper lip lift.

Another common presenting patient issue is asymmetry of the upper lip. Complaints typically include height disparities between Cupid’s bow peaks, differences with smiling, and position of the oral commissures. Mild asymmetries at the Cupid’s bow and along the adjacent vermillion may be improved in some cases, but more lateral or more significant asymmetries are typically beyond the scope of an upper lip lift (see **Fig. 16**). Most lateral lip asymmetries are a consequence of facial asymmetries, which are not amenable to improvement from a procedure done at the base of the nose.

Box 1
Common complaints

1. Chronically long or heavy upper lip
2. Poor tooth show/dental hooding
3. Over-filled lips/poor filler results
4. Filler complications
5. Postsurgical drooping (rhinoplasty/orthognathic)
6. Poorly defined or thin upper lip
7. Asymmetry
8. Buried or drooping corners of the mouth
9. Upper lip incompetence

Fig. 8. Cupid's bow definition and sensuality restored following modified upper lip lift.

SURGICAL TECHNIQUE

Dental and Facial Analysis

The threshold for patient candidacy is significantly lower when using the modified upper lip lift technique. The exceptions are patients in whom a lip lift would create imbalance or an exaggerated appearance. A familiarity with minimum and maximum excision amounts, as well as the necessary minimum height of lip to be left in situ is of great importance. However, the true art of lip lifting

Fig. 9. Youth and tooth show restored following modified upper lip lift.

Fig. 10. Cupid's bow definition tightened following modified upper lip lift.

Fig. 11. Modified upper lip lift combined with nasal base suspension and mucosal excision to improve silicone-caused deformities.

comes from a thorough facial analysis and an ability to "eyeball" what would look good.

Overall facial balance must be considered, comparing soft tissue proportions, as well as dental or skeletal predominance. A primary goal of the lip lift for most patients and practitioners is to increase the incisive tooth show. There is a tipping point that must be respected for each patient, where the sensuality and youthfulness gained from increased tooth show transitions to a toothy or skeletonized appearance with excessive excision. There are no measurements or strict

Fig. 12. Upper lip weighing down from fillers now resuspended following modified upper lip lift.

Fig. 13. Front view. Top photo demonstrating simian appearance and heaviness from Juvederm. Bottom photo after dissolver and lip lift.

Fig. 14. Corner view. Top photo demonstrating simian appearance and heaviness from Juvederm. Bottom photo after dissolver and lip lift.

guidelines that would indicate this level or point. A 3-mm tooth show on a patient with beautiful teeth and normal projection may be lovely, whereas the same amount of tooth show on a patient with a strong dental overjet (type II malocclusion), malocclusion, a gaunt facial appearance, or unappealing dentition may be excessive. Surprisingly, "gummy smiles" are rarely affected or exaggerated with the modified upper lip lift, likely because this technique has the ability to decrease the exertion or strain on the upper lip with smiling (**Fig. 17**).

Fig. 16. Mild asymmetries improved with an asymmetric lip lift. Normal healing in Asian skin types.

Fig. 15. Lateral view. Top photo demonstrating simian appearance, projection, and heaviness from Juvederm. Bottom photo after dissolver and lip lift.

Fig. 17. A more relaxed smile noted in the bottom photo after modified upper lip lift.

Excessive tooth show, maxillary-mandibular imbalance, or unappealing dentition should not preclude one from performing a lip lift. Either a conservative lip lift may be performed, in the 3- to 5-mm range of excision, or the patient may first be referred to a cosmetic dentist, orthognathic surgeon, or orthodontist.

Relative soft tissue balance is also important. We learn to begin by analyzing the horizontal fifth's and the vertical thirds of the face, but there are many variables affecting what we perceive as a pleasant harmony of the face. The proportions we see on patients with thick skin or a full-round face may be drastically different than that of a patient with a thin or delicate face. Rather than measure the proportions directly, the author recommends looking at the face as a whole and simply envisioning the changes to be made. The overall intent is to make the lip fit appropriately in relation to its surrounding structures, primarily the nose, cheeks, and chin. For example, a wide nasal base with fatty ala and flaring will not tolerate the appearance of a foreshortened upper lip.

Surgical Marking

The excision outline and radial reference markings designed by the author are the most crucial part of this procedure. The markings are based on the classic "bullhorn" lip lift. The excision and closure should be treated as a centrally vectored advancement flap. The markings are made in a step-wise and logical fashion to aid in the decision of the proper amount of upper lip excision and to make the design as symmetric possible.

1. The first step is to mark the upper incision (**Fig. 18**). This mark goes across the entire nasal base in the natural alar-facial and alar-labial crease. The lateral extent of this is where the alar-facial crease tapers and ends caudally toward the alar groove. The incision should not go past the superior or lateral extent of the well-demarcated crease, which may end on the inferior or lateral part of the ala. Extending an incision beyond this point may cause distortion and scarring of the crease or even create a pleat from the cheek to the nose and efface the natural upper lateral extent of the upper lip esthetic unit. The incision continues under the nose, making sure not to invade the nasal sill. In hypotrophic nasal sills, a healthy amount of tissue must deliberately be left in situ. Progressing centrally, the marking will reach a peak either at the superior extent of the philtral column or at the divergence of the medial crural footplate around the nasal spine. It is important to note that the line of the philtral column and this peak do not always align. Moving further centrally, the 2 paramedian peaks then transition into a dip at the junction of the lip to the base of the columella. This crease may be low and buried or high at the base of a rotated columella.
2. Two reference markings are made on each side, extending radially from the internal sill and the external rim. The height of excision is then demarcated (**Fig. 19**). The best starting point on most patients is on a horizontal crease or line that the author deems a "line of declaration." Most patients with an elongated lip have 1 or 2 horizontal creases that form in lines of tension during strained smiling. If this is not present, the next step would be to find an area of transition or inflexion on the upper lip following the base of the columella inferiorly. Most lips

Fig. 18. The first step in marking is to find the natural crease between the nose and lip. The lateral-most extent should be at the transition zone between a well-defined and blunted crease. Medially the peak occurs where the medial crural footplate diverges.

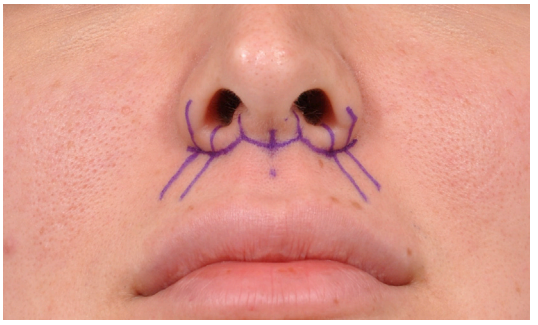

Fig. 19. Radial reference markings are made to aid even distribution and advancement of flaps from the internal sill following the curve of the lip outward as well as from the alar rim margin. The 2 paramedian peaks are marked along with the center of the columella. The ideal height is marked.

look maximally appealing if they begin with a vertical slope, transitioning anteriorly toward the vermillion like a ski ramp (**Figs. 20** and **21**). Once this point is chosen, the surgeon must determine the ideal location for the best looking lip with an incision that would yield the ideal excision for perfect tooth show. As a security measure, mark the minimum amount of remaining lip. For most patients, this would be around 11 mm as measured from the Cupid's bow peak superiorly while the lip is on stretch. Leaving less than 10 mm of residual upper lip height is not recommended.

The amount of expected tooth show gained from each excisional height is demonstrated in **Table 1**. These measurements should only serve as guidelines. The amount to be excised typically ranges between 4 and 11 mm, with most standard excisions ranging between 5 and 7 mm. Excisions aiming for notable tooth show are typically between 7 and 9 mm. An excision of over 11 mm is not advised, because this dramatically increases healing time and makes redistribution of skin difficult for the average patient. There are many variables that determine the actual changes in height including skin thickness, skin laxity, muscle function, and nasal base laxity. The lift obtained on patients with thinner upper lips tends to be more exaggerated than on those patients with thick or hyperelastic lips (see **Table 1**).

Fig. 20. The upper lip looks most pleasant with an immediate transition from vertical to sloped.

Once the excision height is marked, a caliper is used to measure the distance with the lip on stretch. The lower incision marking is then made using a caliper uniformly and in parallel to the upper incision, until the first of the lateral radial markings is encountered (**Fig. 22**). At this point, the dots are connected between the internal rim reference marking and the peak of the lateral upper incision. If there is a minor Cupid's bow asymmetry, this can be corrected at this stage, with an asymmetric excision. Lateral asymmetries cannot be corrected with a surgery centered at the base of the nose.

Once all the dots are connected, the remaining reference markings are drawn, totaling 9 lines. A vertical marking is placed on each incision peak and 1 in the center. Intermediate markings are then made between the peak marking and the internal rim marking (**Fig. 23**). These points serve as closure points for the deep suspension sutures as well as even centralized redistribution markings for the advancement of the lower flap.

Excision

The procedure is performed using local anesthesia and with the surgeon at the head of the bed. The lower incision is made first, with a 15 blade scalpel perpendicular to skin, extending to the junction of the fat and the muscle. The upper incision is then made parallel to the lower incision (**Fig. 24**). The skin and subcutaneous flap is then excised in a plane over the orbicularis, leaving a thin glossy layer of fat intact. This glossy layer is where most of the vasculature lays deep to the superficial muscular aponeurotic system (SMAS). The larger-caliber vessels in the field are the inferior alar arteries, which are buried under the ala and alar sill, running parallel to them (**Fig. 25**).

Dissection

Once the excision is performed, the labial flap is then elevated in a deep sub-SMAS plane. This

Fig. 21. The upper lip convexity in the before photo causes an aged, simian appearance.

dissection releases the labial SMAS from the underlying orbicularis oris. The extent of this dissection is at the discretion of the surgeon, as more extensive dissection may mitigate tension but also causes a dramatic increase in postoperative swelling. Taller excisions typically require a greater degree of release, as do patients who require release and rolling of the lateral vermillion to avoid a subsequent corner lift. The average patient will require release in the deep plane half-way down the central philtrum. Full central dissection is avoided because of possible effacement of the Cupid's bow (**Figs. 26** and **27**). Laterally, the dissection is carried as far out as necessary to obtain a palpable release of the labial flap that would allow a minimal tension closure. For most patients the dissection approaches or extends to the vermillion anywhere lateral to the philtral columns and stops just before the nasolabial fold. Care must be taken to stay in a directly sub-SMAS plane to avoid excessive bleeding or damage to any of the labial elevator complex. Careful hemostasis must be achieved, preferably with a bipolar cautery (**Fig. 28**). Although a hematoma is not typically a risk in classic lip lifts, it is a consideration with a modified upper lip lift given the extensive dissection and dead space created.

Table 1
Estimated lift based on excision height—variable

Excision (mm)	3	4	5	6	7	8	9	10	11
Tooth show (mm)	0	0–1	1–2	2–3	2–4	3–5	4–6	5–7	6–8

Suspension and Closure

The mistake made by most practitioners is performing a simple dermal closure. As we have learned from endoscopic brow lifting and advanced forms of face lifting, the best lift is achieved by performing adequate release of tethering and then by suspension of dense tissue upward to a fixed location. When this is performed in the upper lip, the released skin/SMAS flap is then able to roll over and redistribute tension above the contracted orbicularis.

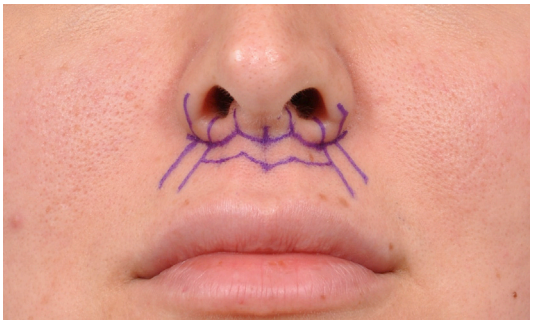

Fig. 22. Castro-Viejo angles caliper is used to mark the height of excision with the lip on stretch. Equal heights are marked between the internal sill reference markings.

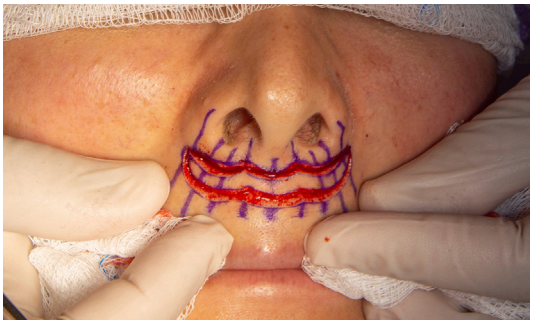

Fig. 24. Perpendicular incisions are made through the skin, fat, and SMAS to the level of the orbicularis layer. Upper and lower incisions are made in parallel to aide in proper approximation.

The dermis at the base of the nose is not firmly attached. The periosteum or overlying pyriform ligament are the only firm structures that can provide a strong base for suspension. Suturing to the periostium produces an over exaggerated tacking of the labial flap. The pyriform ligament is a dense network of fibrous tissue overlying the periosteum that spans the pyriform aperture and is perfect for engagement of suspensory sutures.[7]

A 5-0 PDS suture on a P-3 needle is used at each of the central 7 reference markings. The needle is passed into the junction of the nasal and oral musculature and then carried deep to grab the pyriform ligament but not the periosteum. The needle exits deep to the alar dermis with care not to incorporate the dermis (**Fig. 29**). The needle is then passed inferiorly through the SMAS on the underside of the labial flap (**Fig. 30**). The SMAS of the upper lip is a discrete tissue layer with substantial strength that is located just deep to the reticular dermis.[8,9]

Suturing to the SMAS instead of the dermis allows the skin to approximate without tension or dimpling. This provides a major advantage by pushing the dermal edges together. The incision is closed sequentially from central to lateral (**Fig. 31**). Once the knots are tied, the skin edges should be closely approximated. At the lateralmost reference marking, a 4-0 Vicryl on a PS-2 needle is passed from inside the pyriform coming out radially to grab the SMAS, and then returned back into the nose to complete a mattress suture (**Fig. 32**). The inferior alar artery should be identified and avoided, if possible. The skin is then reapproximated with a plethora of vertical mattress and interrupted 6-0 nylon sutures, with the end point being resolution of any step-offs from the lower to upper skin flaps (**Figs. 33** and **34**). This area is unforgiving and meticulous suturing technique is required.

POSTOPERATIVE COURSE

Postoperative Care

The incisions must be kept moist with ointment at all times in the first several weeks. Patients are given a surgical mask to so they do not feel self-

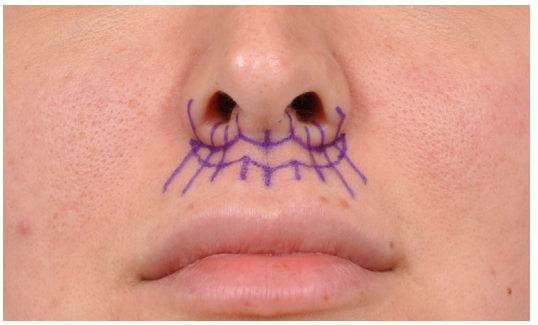

Fig. 23. The remainder of the inferior marking is made by tapering from the internal sill markings upward. The corresponding reference markings are made, as well as 2 intermediate reference markings to total 9 markings.

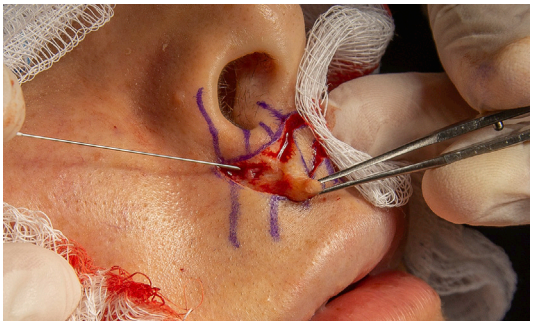

Fig. 25. The marked skin, fat, and SMAS are excised leaving a thin, glossy fat layer intact to avoid damage of vessels and the inferior alar artery marked in the photo.

Fig. 26. Deep-plane/sub-SMAS elevation is performed directly over the muscle layer.

Fig. 28. Hemostasis is obtained using bipolar electrocautery to minimize risk of hematoma.

conscious. Sutures are typically removed partially at day 3 and completely at day 5 (**Fig. 35**). Taping is neither affective nor necessary. Patients are forewarned that swelling may appear extreme and that the appearance of the lip typically takes 3 months to return to normal. Relative to others, this technique produces significantly more swelling in this area because of the disruption of bilateral lymphatic drainage pathways as well as muscle trauma causing a postoperative myositis. The stiffness and swelling in the first 3 months may benefit incisional healing by limiting movement at the incision line. Patients are seen at 3-week intervals for reassurance and potential injection of 5-fluorouracil 50mg/cc into a firm orbicularis patch. The nasal base is also quite responsive to fractionated CO_2 laser, should that be required. Most patients receive this routinely at 60 and 120 days at a low setting.

Potential Sequelae

The most commonly encountered sequelae of an upper lip lift are scarring and widening of the nasal base. For this reason, most practitioners who perform the lip lift procedure do so on elderly patients with light skin. Issues can arise with any technique. However, when using the bullhorn incision, even if unsightly scarring occurs, it can most often be easily and significantly improved with scar modulation therapies. Off-label use of 5-fluorouracil 50mg/cc can help flatten hypertrophic incisions. CO_2 laser can improve hypertrophic, atrophic, and other types of scarring.

Alternative techniques that involve more complex types of incisions, such as the philtral stretching variations of the upper lip lift, L-shaped philtrum lift, extended incision lip lift, Greenwald incision, double duck suspension, and the Italian technique, may result in greater amounts of scarring and changes to the nasal base that are difficult to reverse. Atrophic scarring is quite common, as well as skeletonization or effacement of the nasal base. Incisions extending into the nasal sill inherently cut away healthy mass and volume at the nasal base while advancing the skin of the lip inside the nose where it does not naturally reside.

Distortion or effacement of the nasal base can occur with untoward tension on compliant portions of the nasal base. When tension is combined with excision of portions of nasal sill, the distortion can become more prominent. If the central lip is lifted or excised more than the lateral portions,

Fig. 27. Sub-SMAS dissection is continued half-way down the central philtrum. Lateral dissection is typically carried to the same level or greater.

Fig. 29. 5-0 PDS suture enters between the nasal and labial muscle layers, passes deep grabbing the pyriform ligament, and exits just deep to the dermis.

Fig. 30. The 5-0 PDS is passed deep to the dermis to grab the SMAS layer only.

this can also produce an unnatural and disproportionate postoperative appearance to the lip that further exaggerates a suboptimal outcome. Central lip lifts are rarely indicated and most commonly produce an exaggerated upturn of the central lip. This often results in relative worsening of the appearance of lateral lip hooding. It is important to remember that there are limits to what a procedure at the nasal base can achieve. The intent to change the character of the lip significantly should be avoided.

Avoiding Sequelae

The first way to assure a superior result is proper incision design, following the principles of the bullhorn lip lift. This means avoiding cutting into and damaging the nasal sill by carrying incisions inside the nose. Most techniques that involve hidden incisions inherently require that healthy sill skin is excised and replaced with skin from the lip. Labial skin does not naturally occur within the nasal sill and it should not be placed there during a strictly cosmetic procedure. Once the sill is removed and scarring occurs, the sill cannot be replaced and the atrophic skin that replaces it is quite difficult to repair.

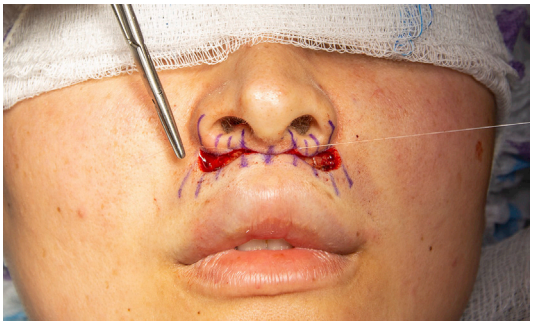

Fig. 31. A 5-0 PDS is tightened with a single knot, followed by a slip knot, then a locking knot.

Fig. 32. The 7 central reference markings are closed with the deep layer of 5-0 PDS sutures. The 2 most lateral markings are closed using a 4-0 Vicryl entering from the inside of the nose, passing externally between the orbicularis muscle and nasal ala to grab the SMAS layer then exit through the nose by passing through the nasolabial junction.

Problematic healing also seems to arise from inadequate incision length and insufficient deep tissue release. Making smaller incisions, whether single in the center or bilateral incisions under the nasal sills, tend to increase complications as well. Smaller incisions may limit the proper release of tension and redistribution of skin, while also presenting the potential for disproportionate lifting. This means that, although incisions are limited, there may be higher tension placed on each incision point, resulting in poor healing. Uniform redistribution avoids irregularities and skin bunching by spreading the tension evenly along the length of the entire incision. The perioral region is extremely dynamic, and all possible efforts to relieve tension at the incision should be performed. Proper release of the deep structures to reduce closure tension, coupled with adequate deep suturing, followed by intricate superficial suturing, will enhance results. The practitioner should be aware that the nasal base is an unforgiving area with regard to

Fig. 33. Superficial closure is performed with a combination of 6-0 nylon vertical mattress and interrupted sutures.

Fig. 34. Closure using enough sutures to avoid any step-offs or irregularities.

irregularities and scarring. Although it may not seem so, longer incisions tend to heal better than shorter ones.

Some lip lifting techniques rely on muscle suspension, excision, or plication to relieve tension on the skin.[6,10] This ideology may theoretically be supported by muscle-tightening procedures performed during facelift surgery; however, mimetic muscles are not routinely suspended during rhytidectomy. Rather, the SMAS-platysma complex is tightened, which carries no mimetic function. A dense SMAS fascia definitively exists in the upper lip just deep to the dermis and superficial to the orbicularis oris muscle. The SMAS-skin flap may be released and used for lifting similar to deep-plane lifting in the face. The orbicularis oris is a mimetic muscle that is extremely dynamic and sensitive to trauma. From the author's experience, muscle binding has a higher probability of causing fibrosis at the plicated region and may actually have a tendency to pull the nasal base in a downward direction. Still, muscle plication or imbrication may serve a purpose in some patients during various lip lifting procedures including the modified upper lip lift. When binding is performed during this procedure, it is typically limited to the uppermost 2 mm of the orbicularis muscle. The upper orbicularis is taken and suspended to the pyriform ligament using 5-0 PDS sutures to limit potential damage to the muscle and nasal base. Experienced practitioners may use muscle-binding techniques routinely with high success rates, but amount of muscle trauma in the hands of the novice surgeon should be limited.

Fig. 35. Sutures are typically removed at days 3 and 5. This photos was taken 5 days postoperatively.

Direct vermillion excisions tend to cause a blurring of the vermillion and a visible scar with a potentially unnatural appearance that almost always requires lip liner camouflage. Once the vermillion is distorted, it cannot be recreated. In the author's opinion, the only indication for an incision at the vermillion border is the rare patient who requires a corner of the mouth lift.[11] Corner lift incisions are limited and seldom cause issues; however, we perform them rarely because the modified upper lip lift has the ability to treat this region on most patients.

Complications

A chart review of 823 consecutive lip lifts from January 2015 to October 2018 in the author's private practice was performed. Histories were reviewed for any complications seen past the 3-month mark. Of note, there were no patients demonstrating any limitation in movement or smile. Five patients required revision to obtain further lifting or further lifting and symmetry. Two patients developed dermal atrophy and telangiectasias following injection with triamcinolone. Because of this, the author no longer injects triamcinolone postoperatively in these patients. Two patients complained of vague changes in character of the nostrils, which were difficult to depict in photos. Two patients experienced minor hematomas, which were limited by tamponade. Two patients had prolonged edema extending to the 4-month mark, which then resolved. Both of these patients had previous silicone injections and an 11-mm excision. Ten patients developed a rash from antibiotic ointment. Two patients presented with a 1-mm rim of eschar/epidermolysis of unknown cause around the lateral nostril base that healed without incidence. Although many patients received scar modulation with injections of 5-fluorouracil 50mg/cc and/or CO_2 laser treatments on the incisions, none were bothered by their incisions. There were no patients found to have increasing asymmetry. There were no incidents of infection.

Forty-five patients had a simultaneous lip lift with rhinoplasty with no adverse sequelae. Alarplasty was performed at a separate time on all but 2 patients to avoid lateral scarring. Sixty-two patients had simultaneous lip lift with rhytidectomy

with no adverse sequelae. Sixty-eight patients had simultaneous mucosal lip reductions mostly to reduce polymer-related abnormalities. Fifteen received simultaneous dermis or SMAS grafts to augment lip volume and there were no adverse effects. One patient requested a subsequent corner lift. The remainder of the patients seeking corner lifting before surgery received an adequate degree from the modified upper lip lift.

SUMMARY

A variety of lip lift techniques have been created over time with the intent of diminishing scarring and poor outcomes. A great deal of energy has been misdirected toward compensatory measures such as changes in incision design rather than simply improving the manner in which the lip is lifted. The modified upper lip lift is a sub-SMAS release and suspension technique that simplifies procedural steps and minimizes risks of adverse outcomes. Furthermore, it permits a wider application of an often-needed technique to all ages, ethnicities, genders, and skin types. We have learned a great deal from other facial cosmetic surgeries, such as brow lifts, upper blepharoplasty, and deep-plane rhytidectomy. As guided by the evolution of upper blepharoplasty, muscle preservation is essential for maintaining proper function and volume. Face-lifting techniques have demonstrated a much greater efficacy when tension is adequately released then resuspended to a firm or fixed structure, such as is seen with deep-plane facelifts.

The upper lip lift has the ability to produce a high yield change on the face with a single, small procedure. It can produce a younger and more sensual appearance by shortening the perceived height of the midface, as well as by increasing tooth show and oral visibility. The nasolabial fold in most patients appears softer and shortened as well. This easily reproducible technique has repeatedly demonstrated consistent outcomes with an exceedingly low complication rate. The need for such a procedure is under-recognized in patients of all ages. The modified upper lip lift is a safe, consistent, reproducible, and widely applicable technique for any gender, ethnicity, and skin type.

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