## The Evolution of My Extended SMAS-Biplanar Deep Plane Facelift to a Composite Tissue Deep Plane Face and Neck Lift: Similarities and Differences

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#### Abstract

**Keywords** 

► facelift

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deep plane

rhytidectomy

In this article, Dr. Stephen W. Perkins, a seasoned facial plastic surgeon, presents his refined techniques in facelift surgery developed over four decades of practice. His evolution from traditional methods to the current composite tissue deep plane facelift is elucidated. His composite tissue deep plane facelift involves meticulous dissection and repositioning of the superficial musculoaponeurotic system (SMAS) and platysma in the deep plane, as well as incorporating his innovative "Perkins' Kelly clamp anterior platysmaplasty." This technique, refined through years of experience, aims for natural, enduring results, crucially addressing patient concerns such as jowling and neck laxity. Long-term analysis reveals the advantages of Dr. Perkins' technique, particularly in achieving sustained cervicomental angle improvement for over a decade postoperatively. This article underscores the importance of understanding deep plane facelift techniques, distinguishing between different approaches, and tailoring surgical interventions to individual patient characteristics. Dr. Perkins' comprehensive approach, incorporating advancements in surgical technique and meticulous patient care protocols, exemplifies the goal of achieving natural, long-lasting facial rejuvenation.

In the aging face, there is a loss of support and elasticity resulting in inferior and anterior displacement of skin, soft tissues, fat, and platysma musculature. Midfacial descent creates elongation of lower eyelids, flattening of the malar cheek and midface, noticeable jowling, and loss of definition of the jawline and neck. The constant, unrelenting effect of gravity plays a role in these changes. Genetic/hereditary factors, hormonal changes (such as menopause in women), and contributing factors such as sun exposure, alcohol, tobacco, and lifestyle can all have an effect as well. It is these aging changes that patients present to a facial plastic surgeon's office seeking to reverse. Most patients do not thoroughly understand surgical approaches and options available to them. Instead, they may do a cursory Internet or social media search fraught with different buzzwords and misinformation. Patients see advertisements by surgeons promoting "mini" and "weekend" lifts in hopes of attracting

more patients due to supposedly less downtime or morbidity.<sup>1,2</sup>

The neck is the overwhelming reason why the vast majority of patients seek a facelift. In fact, they may come in only seeking a "neck lift," and it is not until the consult visit that they become educated on what a facelift involves and that the face and the neck go together most of the time.

Most facelifts that accomplish what the patient desires involve treatment of the superficial musculoaponeurotic system (SMAS) and the platysma in some manner to improve the cheeks, jawline, and neck. Through years of experience, the senior author believes that the main thing that attracts more patients over the long term is good, long-lasting, natural results. The senior author's preferred method for facelifting over most of his career was the extended SMASbiplanar deep plane facelift with anterior platysmaplasty. This is a "biplanar" facelift with the SMAS-platysma one layer

accepted manuscript online April 24, 2024 article published online June 3, 2024 Issue Theme The Deep Plane Face and Neck Lift; Guest Editor: Stephen W. Perkins, MD © 2024. Thieme. All rights reserved. Thieme Medical Publishers, Inc., 333 Seventh Avenue, 18th Floor, New York, NY 10001, USA DOI https://doi.org/ 10.1055/a-2312-9176. ISSN 0736-6825. with two vectors and the skin redraping in a somewhat different vector. SMAS and platysma tightening and repositioning with sling suspension is the key to effective yet natural results in facelifting. By firmly lifting the foundation of the face, including the neck and platysma, the facelift will last much longer, and most importantly will allow a natural repositioning of the skin to create "the natural look," which is what most patients desire.

This article aims to show the evolution of the senior author's facelift technique over the past 40 years of practice, compare the extended SMAS-biplanar deep plane facelift to the more "popularized" composite tissue deep plane facelift, which the senior author now primarily performs, as well as compare the senior author's composite tissue deep plane facelift to other surgeon's techniques.

# Evolution of Dr. Perkins' Facelifting Technique

Dr. Stephen W. Perkins (senior author) completed his fellowship training through the American Academy of Facial Plastic and Reconstructive Surgery with Dr. Gaylon McCollough in Birmingham, Alabama, in 1983. Here, the senior author trained in the short flap rhytidectomy technique with SMAS plication. This technique produced nice results with decreased morbidity and risk.<sup>3</sup> The senior author performed this technique for the first 2 years of his practice; however, without adequately treating the neck, there were several less-than-satisfactory results. This prompted the senior author to begin routinely performing anterior platysmaplasty and the evolution of the "Perkins' Kelly clamp anterior platysmaplasty" technique. The senior author's facelifting technique then transitioned from short flap rhytidectomy with SMAS plication to the extended SMAS-biplanar deep plane facelift, which he performed for more than 30 years with excellent results. Over the past 3 years, his extended SMAS-biplanar deep plane facelift technique evolved into what he now exclusively performs, the composite tissue deep plane facelift. Both techniques employ the "Perkins' Kelly clamp anterior platysmaplasty."

The primary motivation behind transitioning to the composite tissue deep plane facelift lies in minimizing skin undermining, consequently enhancing skin vascularity in the preauricular region, and reducing the risk of skin flap compromise. By minimizing skin undermining, the potential for seroma/hematoma formation within dead space is significantly reduced. In both approaches utilized by the senior author, the same deep plane dissection extent and ligamentous releases are performed. With the biplanar technique, the skin flap can more easily be repositioned in a different vector as needed to prevent skin bunching and dog-ear formation, but it should be noted that the SMAS-platysma vectoring is the same for either technique performed by the senior author. With both approaches, there is a more vertical vector of the SMAS in the cheek, which allows for a consistent achievement of excellent midface volumization. Although midface volumization is not quantitatively measured by the senior author, this enhancement is subjectively evident in the before and after images presented for both techniques.



**Fig. 1** (A) Before and (B) after extended superficial musculoaponeurotic system (SMAS) biplanar deep plane facelift with liposuction of supraplatysmal fat.

## The Senior Author's Composite Tissue Deep Plane Facelift

A thorough history and physical examination is performed before performing any surgical intervention. During this initial evaluation, a decision is made between the surgeon and the patient about what procedures will be performed. Often, patients may be candidates for additional procedures in conjunction with their facelift to fully realize their aesthetic goals. This section's goal is to summarize the steps of the senior author's composite tissue deep plane facelift with comparisons to his previously performed extended SMASbiplanar deep plane facelift.

To begin, an incision is made in the submental crease; judicious liposuction of the neck and jowls may then be performed, and submental skin flaps are elevated. It is imperative to remove supraplatysmal excess fat especially in the patient with the heavy neck. Inadequate removal of supraplatysmal fat will result in treatment failure (see **- Fig. 1**).

The senior author then performs his "Perkins' Kelly clamp anterior platysmaplasty" by grasping the loose anterior platysma and subplatysmal fat in the midline down to the cervicomental angle with a Kelly clamp (see **– Fig. 2**). Interval

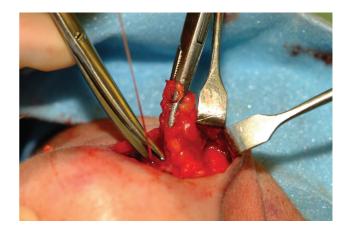


Fig. 2 Perkins' Kelly clamp anterior platysmaplasty.

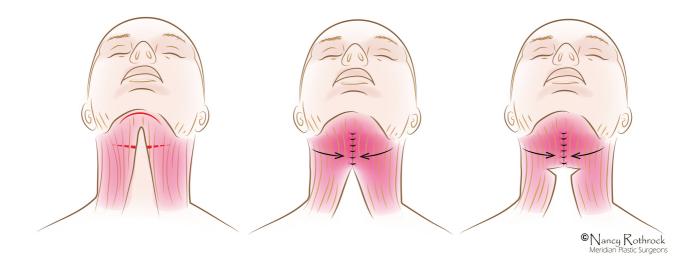


Fig. 3 Anterior platysmaplasty.

bipolar, cut, and deep 3-0 Vicryl (Ethicon, Somerville, NJ) suturing is performed until the excess midline tissue is excised and the platysma borders have been secured in the midline, typically down to the level of the thyroid cartilage, creating a corset (see **- Video 1**). This technique significantly reduces the risk of platysma band reformation and submental hollowing, also known as a cobra deformity. A wedge of platysma at the cervicomental angle can be excised if significant banding is present, taking care not to create an abnormally sharp or acute cervicomental angle (see Fig. 3). Attention is then turned to the rhytidectomy, where an incision is always made underneath the temporal hair tuft at the level of the helical insertion, in and around the contours of the ear (post-tragal except in densely bearded dark-haired men), and reverse beveled high posteriorly into the scalp. It is important to note that it is not necessary to extend the temporal hair tuft incision into the anterior hairline. In men, depending on the length of their hair, most postauricular hairline incisions travel shortly along the hairline for 2 to 3 cm, then more posteriorly into the scalp. No incisions are carried completely along the hairline all the way to the nape of the neck. In the extended SMASbiplanar deep plane facelift technique, the skin flaps were elevated anteriorly into the cheek anywhere from 7 cm to as much as 9 to 10 cm toward the jowl or modiolus region. Now, the preauricular elevation of the skin flap is from 4 cm to a maximum length of 6 cm with the senior author's preferred composite tissue deep plane facelift technique.

#### Video 1

Perkins' Kelly clamp anterior platysmaplasty. Online content including video sequences viewable at: https://www.thieme-connect.com/products/ejournals/html/10.1055/a-2312-9176.

The SMAS is incised starting anteriorly below the zygomatic arch at the region of the malar eminence and continues with a minor curve but direct fashion toward the earlobe. The senior author's previous incision through the SMAS with the extended SMAS-biplanar deep plane facelift was from the malar eminence extending posteriorly paralleling and just underneath the zygomatic arch, then turning nearly 90 degrees inferiorly preauricularly to the earlobe and extending inferiorly anterior to the sternocleidomastoid muscle (SCM). Modifications occurred over the past 10 years to a semilunar incision more anteriorly from the malar eminence across the parotid to the earlobe (see **~Fig. 4**). All incisions then continue inferiorly approximately 5 to 6 cm just anterior to the border of the SCM.

The SMAS flap is then carefully elevated over the parotid and superficial to the parotid duct, masseter muscle, and facial nerve branches (see >Video 2). SMAS elevation is sufficient when the masseteric cutaneous ligaments are released and the SMAS flap can be lifted superiorly and posteriorly and suspended to the posterior zygomatic fascia/periosteum with a 0 Vicryl suture (Ethicon, Somerville, NJ; see - Fig. 5). The SMAS is then incised anteriorly 3 to 4 cm at the level of the earlobe, and parallel to the mandible, so that the inferior SMASplatysma flap can be suspended to the mastoid periosteum with a 0 Vicryl suture. Subsequently, around 10 to 12 3-0 Monocryl sutures (Ethicon, Somerville, NJ) are used to further suspend, support, and adhere the SMAS-platysma flap to its new suspended location along the length of its borders, further supporting the composite cheek tissues (see > Video 3). In the extended SMAS-biplanar deep plane facelift, the skin flaps are then repositioned in a somewhat separate plane than the underlying SMAS flap, thus defining the biplanar technique. With the composite tissue deep plane facelift, there is less mobility to shift the overlying skin in a different plane (see Fig. 6). Excess skin is trimmed, and skin flaps are sutured in place. Tisseel (Baxter Healthcare Corp., Deerfield, IL) fibrin sealant is usually utilized prior to complete skin closure instead of drain placement in the neck.<sup>4</sup>

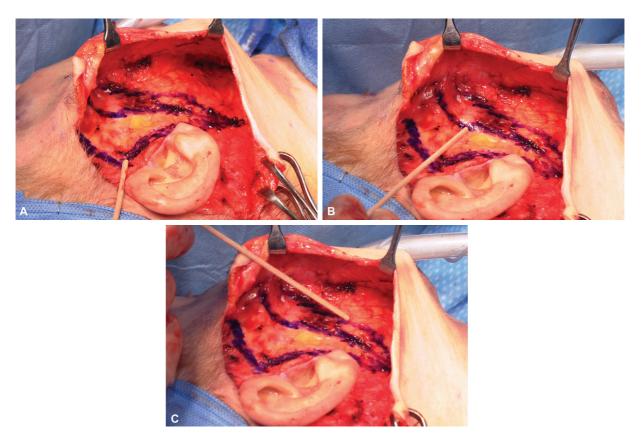


Fig. 4 Differences in superficial musculoaponeurotic system (SMAS) incisions. (A) A high SMAS incision. (B) An extended SMAS biplanar incision. (C) A composite tissue deep plane facelift incision.

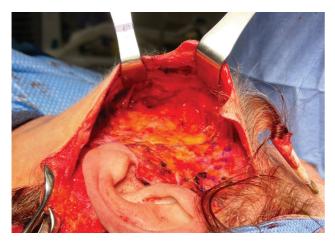
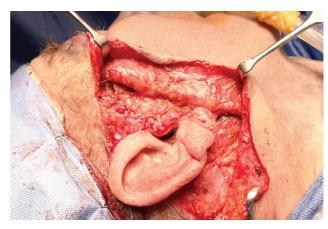


Fig. 5 Deep plane elevation.



**Fig. 6** Remaining degree of skin undermining after superficial musculoaponeurotic system (SMAS) suspension.

#### Video 2

Incision and elevation of superficial musculoaponeurotic system (SMAS) platysma flap. Online content including video sequences viewable at: https://www. thieme-connect.com/products/ejournals/html/ 10.1055/a-2312-9176.

#### Video 3

Suspension and imbrication of superficial musculoaponeurotic system (SMAS) platysma flap. Online content including video sequences viewable at: https:// www.thieme-connect.com/products/ejournals/html/ 10.1055/a-2312-9176.

### Further Comparison of Deep Plane Facelifting Techniques

It was not until the 1970s that the idea of a deeper plane of dissection developed. Prior to this time, facelift surgery was mainly subcutaneous dissection with or without suture suspension of the underlying fascia and skin excision.<sup>5</sup> With the investigation of the SMAS layer by Mitz and Peyronie, and the advent of dissecting deep to the superficial fascia by Skoog, the evolution of modern-day facelifting began.<sup>6-9</sup>

To compare deep plane facelifting techniques, the "deep plane" needs to be fully defined. The deep plane is the plane of elevation deep to the SMAS in the anterior mid-cheek and jawline generally overlying the fascia of the masseter muscle. The deep plane is also considered underneath the platysma in the neck below the mandible even if the skin is elevated as a separate layer in the neck as is necessary when performing an anterior platysmaplasty to treat moderate to large amounts of skin laxity in the neck. This deep plane dissection occurs in both the extended SMAS-biplanar deep plane facelift and the composite tissue deep plane facelift.

Skin incisions among different facelifting techniques are quite similar and can be tailored to the specific patient. Some surgeons elect to carry their postauricular incision down the occipital hairline citing this allows for more excision of neck skin at closure.<sup>10</sup> The senior author routinely extends his postauricular incision much higher into the posterior hairline, which essentially completely hides and camouflages the incisional scar line. Even with this incision, there is significant advancement of the excess skin superiorly and slightly anteriorly behind the ear. This allows a larger amount of excess skin to be removed while completely aligning the postauricular hairline, leaving no scar along the hairline down the nape of the neck. So for patients with large amounts of redundant and lax neck skin, it is quite successfully removed and the hairline is realigned without any step-offs.

The degree of anterior cheek skin undermining is less in the composite deep plane facelift than in the extended SMAS-biplanar deep plane facelift. This leaves less flexibility in moving the skin in a different vector than the composite midface and jawline as compared with the more biplanar SMAS lifts. Subcutaneous dissection past the cervicomental angle in the neck is similar in both techniques. In patients with significant jowling and neck adiposity, judicious liposuction of the supraplatysmal fat is performed. In most cases, the senior author then opts for performing the "Perkins' Kelly clamp anterior platysmaplasty" technique with complete neck skin undermining. This removes anterior lax and redundant platysma with the correct amount of subplatysmal fat. Thus, the senior author does not routinely extend the submental dissection deep to the platysma muscle, nor routinely excise the digastric muscles or submandibular glands, as is sometimes performed by other surgeons.<sup>11</sup> By incising the SMAS/platysma flap at the level of the earlobe and suspending the inferior SMAS-platysma flap to the mastoid periosteum, a platysma "corset sling" is created, which typically is enough to support or resuspend a ptotic submandibular gland.

A noted difference in surgeon-specific technique is the deep plane entry point utilized. Other surgeons' deep plane entry point extends from near the lateral canthus to the gonial angle.<sup>10</sup> In contrast, a high SMAS technique extends more superiorly over the zygomatic arch and arches posteriorly and inferiorly in the adjacent preauricular area.<sup>12,13</sup> A high SMAS technique is not the senior author's preference as he attains excellent vertical lifting results with the more inferior and anterior SMAS incision. The extended SMAS-biplanar deep plane facelift entry point is a slightly curvilinear incision in the SMAS from the anterior zygoma extending posteriorly and inferiorly to the gonial angle. This entry point is 1 to 2 cm more posterior than the composite tissue deep plane facelift. The senior author has moved his incision "entry point" through the SMAS to the deep plane much more anteriorly than previously done with the extended SMAS-biplanar deep plane facelift. This is attributed to the reduced sub-SMAS/deep plane dissection directly over the parotid gland, which saves some dissection time. However, the senior author holds the perspective that the entry point utilized in either technique plays a minimal role in achieving exceptional outcomes. Instead, the critical factor lies in the extent of dissection and ligament release, enabling effective mobilization of facial tissues. The incision location of the senior author's composite tissue deep plane facelift starts at the malar eminence and runs diagonally to the earlobe at about the most anterior portion of the parotid gland leaving only 2 to 3 cm of undermined skin. There is still approximately 3 to 4 cm of SMAS advanced superiorly and laterally to be suspended to the posterior zygomatic arch dense tissues allowing a layer of scarification and some volume. Currently, with the senior author's composite tissue deep plane facelift, the entry point is more anterior than prior technique, but not quite as anterior as the well-described entry point of Dr. Jacono and others in the field of deep plane facelift.<sup>10,14</sup> The senior author prefers to have some SMAS itself for a flap of suspension superiorly to and above the zygomatic arch. It should be noted that other surgeons will avoid incision of the SMAS altogether, advocating for SMAS plication or multiple SMAS "microimbrications" via purse-string suspension sutures such as in the minimal access cranial suspension (MACS) lift.<sup>15</sup> The senior author does not advocate these "less invasive" types of techniques as he believes the best way to achieve long-lasting results is via SMAS/platysma flap dissection and repositioning, creating a wide area of scarification suspension.

Both the extended SMAS-biplanar deep plane facelift and the composite tissue deep plane facelift extend the SMAS deep plane entry point inferiorly as it transitions to a subplatysma flap. This is carried inferiorly along the anterior SCM for approximately 4 to 6 cm. By staying on the anterior surface of the SCM, the more posteriorly located great auricular nerve is kept safe. Release of the cervical platysma retaining ligaments is performed to allow further posterior movement of the lax platysma of the lower neck. The sub-SMAS/platysma dissection is carried anteriorly into the midface in both approaches as the dissection transitions into a subcomposite midface and jawline soft-tissue layer. Dissection overlies the masseter muscle and facial nerve branches. Routine release of the masseteric cutaneous ligaments is performed in both approaches. Also, both approaches can perform buccal fat excision through this dissection if deemed necessary by patient characteristics (heavy round cheeks and/or ptotic cheek jowl tissues).

A key noted difference among surgeon-specific deep plane facelift techniques is the routine release of the zygomatic osteocutaneous ligaments. This release assists in repositioning the inferior and medial midface superiorly to its "original" position on the malar prominence.<sup>10</sup> In the extended SMAS-biplanar facelift or the senior author's composite tissue deep plane facelift, the zygomatic osteocutaneous ligaments/malar dermal attachments are partially transected. Full transection of these ligaments is not typically performed, but can be easily completed if deemed necessary by the preoperative patient characteristics and the degree of movement of the midfacial composite tissues found at the time of surgical dissection. A very nice and adequate malar and midface volumization occurs with the senior author's technique of only partial transection and release of the malar dermal ligamentous structures.

In the extended SMAS-biplanar deep plane facelift or the senior author's composite tissue deep plane facelift, the SMAS lift is in a posterior and superior fashion, anchoring it to the posterior zygomatic fascia/periosteum in the superior preauricular area. This creates a natural and youthful result. This is similar to other surgeon's composite tissue deep plane facelift techniques that also suspend the SMAS in a vertically and superiorly oblique vector. Dr. Jacono has studied his angle of suture vectoring, which tends to be 60 degrees, corresponding to the angle of the zygomaticus major muscle.<sup>10,16</sup> A noted difference in other surgeon's techniques is that the suspension point for the superior SMAS flap is anchored to the fascia approximately 2 cm above the zygomatic arch, similar to high SMAS techniques.<sup>10</sup>



**Fig. 7** (A,B) At 2 years postoperatively from extended superficial musculoaponeurotic system (SMAS) biplanar deep plane facelift.



**Fig. 8** (A–D) At 1 year postoperatively from extended superficial musculoaponeurotic system (SMAS) biplanar deep plane facelift.

zygomatic arch, there is volume added to the mid and upper cheek with either technique.

Both the extended SMAS-biplanar deep plane facelift and the composite tissue deep plane facelift approaches are also similar in that they incise the SMAS/platysma flap in an oblique fashion at around the level of the earlobe/gonial angle to pull the platysma in a separate vector than the more superior SMAS flap. This inferior SMAS/platysma flap is suture anchored to the mastoid periosteum, which helps create a tight jawline, supports the ptotic submandibular gland, aids in smoothing platysmal bands, and further defines the cervicomental angle.<sup>4,17</sup> The use of multiple suspension sutures to suspend the SMAS/platysma flap is common in both techniques. No matter the technique, both approaches create a natural, youthful appearance with longlasting results, especially in the neck! (see **– Figs. 7–9**).

#### **Data-Proven Long-Term Neck Results**

To prove the long-lasting neck results with the "Perkins' Kelly clamp anterior platysmaplasty" technique, a retrospective review was conducted to analyze the cervicomental angle of 840 of the senior author's primary facelift patients over a 10year period. All patients included in the study had undergone extended SMAS dual suspension rhytidectomy with the



**Fig. 9** (A–D) One-year postoperative composite tissue deep plane facelift.

"Perkins' Kelly clamp anterior platysmaplasty" technique. Results showed that patients maintained their post-rhytidectomy cervicomental angle for at least 10 years, and never returned to their preoperative submental baseline (see **- Table 1** and **- Fig. 10**).<sup>18</sup>

### **Postoperative Care**

The senior author performs all his surgical cases in a private accredited and certified ambulatory surgery center in Carmel, Indiana. For many years, facelift patients would go home the night of surgery after they recovered in the postanesthesia care unit immediately after surgery. Most patients are now required to stay in the facility overnight for vital sign monitoring, medication administration, compression deep venous thrombosis prevention, and routine nursing care if they have significant comorbidities, intubation time lasting over 5 hours in a patient 65 years or older, or at physician discretion. All facelift patients are also given the option to stay in the facility overnight and many select this option.

A headwrap is placed before leaving the operating room, and every patient is seen first thing in the morning on postoperative day (POD) 1. At the POD 1 visit, the headwrap is removed, the skin flaps are examined for viability, seroma formation, and any evidence of facial nerve weakness. For most of the senior author's career, surgical Jackson-Pratt (JP) drains were placed bilaterally and typically removed on POD 1. A neck wrap would then be applied for an additional day. For the past year, the senior author has discontinued the use of all JP drains in facelift surgery and has switched to intraoperative use of Tisseel (Baxter Healthcare Corp.) fibrin sealant to "glue" down the skin flaps. This specific Tisseel technique was adapted from Dr. Ronald Caniglia in Scottsdale, Arizona, who has utilized Tisseel in facelift surgery for 30 years.<sup>19</sup> With JP drain placement, the senior author's incidence of seromas and hematomas is estimated at around 5 and less than 1%, respectively. With the correct application of Tisseel, the seroma rate approaches zero.<sup>20</sup> Occasionally, a small less than 1- to 2-mL minor fluid pocket can arise underneath the skin flap if the Tisseel was not correctly applied in that area. If this occurs, needle aspiration and pressure dressing is applied, and this typically resolves the following day with no added morbidity or concern. Since the application of Tisseel, the senior author has noted decreased ecchymosis and edema in the immediate postoperative period, as well as less submandibular thickening (from the drain site) requiring steroid injection in the subacute period (see **Fig. 11**). The rate of cellulitis is estimated at less than 5% with all patients receiving 5 days of Keflex followed by 5 days of doxycycline postoperatively. For the last couple of years, the senior author believes he has further decreased this cellulitis rate with the addition of hypochlorous acid (Phase One, Nashville, TN) irrigation intraoperatively.

The senior author has never had any patients with permanent facial nerve paralysis. Around 2% of the time, the depressor anguli oris muscle can be weak unilaterally. If this occurs, botulinum toxin is injected to the contralateral side for symmetry and this weakness resolves over the course of a few weeks to a few months.

At POD 7, patients are seen for their second visit where all sutures and staples are removed except for a few permanent nylon sutures securing the earlobe, which are removed on POD 10. Patients receive a complementary aesthetician appointment on POD 10 where cosmetic is applied to any remnant ecchymosis and proper skin care is advised. Light aerobic exercise is restricted until POD 14 and high-intensity aerobic exercise or weight training is restricted until POD 21.

**Table 1** Long-term cervicomental angle results with the Perkins' Kelly clamp anterior platysmaplasty technique

	Initial	6 mo	1 y	5 y	10 y
MCA	115.73 (σ=11.67)	95.35 (σ = 7.53)	95.99 (σ = 7.91)	95.05 (σ=8.60)	95.57 (σ = 10.38)
Δ		20.38 (p < 0.001)	19.74 (p < 0.001)	20.68 (p<0.001)	20.16 ( <i>p</i> < 0.001)

Abbreviation: MCA, mentocervical angle.



Fig. 10 (A-H) Long-term neck results. Top row: pre op, 1 year, 5 years, 11 years post op. Bottom row: pre op, 1 year, 8 years, 14 years post op.



**Fig. 11** (A,B) One-day postoperative facelift results with Tisseel fibrin sealant application.

If there are no concerns, patients are then seen at 1 month, 3 months, 6 months, and 1 year postoperatively.

Postoperative skin changes can and will occur in facelift surgery. In the immediate postoperative period, there can be venous congestion and duskiness to the skin flap requiring nitropaste. This is less common in the composite tissue deep plane facelift given the smaller area of skin undermining, but it still occurs at an estimated rate of less than 0.5%. Rarely skin slough can occur necessitating conservative wound management. Occasionally, outside of the immediate postoperative period, there can be areas of skin discoloration or vascular ectasia in the neck requiring broadband light or intense pulsed light therapy to resolve. Cutaneous ridges or skin thickening is possible and typically resolves with a couple of rounds of Kenalog 10 mg/mL injection (Bristol-Myers Squibb, Montreal, Canada). Many ridges were noted at the area of drain placement; now, however, with the use of Tisseel fibrin sealant, this has decreased significantly.

Finally, as with all surgeons doing face and neck lifts, there is always some laxity "give-back" or a recurrent platysma band that needs a revision under the chin in the first year to 18 months. This rate is estimated at approximately 4% based on patients' own loss of tissue elasticity and/or strength of platysma bands. A submentoplasty "tuck-up" corrects these issues and is offered to patients if this occurs and is performed under intravenous sedation and local anesthesia.

Conflict of Interest None declared.

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