

The Hybrid Facelift

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Summary: In facelift surgery, many surgeons tend to choose one superficial musculoaponeurotic system (SMAS) technique over another. SMAS plication augments tissue using folding, which is very useful in deflated faces. In heavy faces, SMAS-ectomy and, to an arguably further extent, full SMAS undermining and excision can reduce volume and avoid the excessive fullness that may follow plication. Not all patients present with uniform deflation or uniform fullness of the face. Some will present with a mixed picture, fullness in one area such as the cheek with deflation in another (eg, over the angle of the mandible). In those patients, plication alone may lead to undesired fullness, typically overaugmenting cheeks or angle of the mandible. SMAS elevation and excision may avoid overaugmentation (arguably better than simple SMAS-ectomy), but it is technically more demanding and consumes longer operative time. An alternative approach is suggested in this article. For those patients with “mixed” pictures, we suggest a hybrid of existing SMAS techniques, in which for each side of the face, the face is divided into upper (cheek) and lower (jawline and neck) areas. Deflated areas are addressed with plication. Full areas are addressed with SMAS undermining and excision. Although this kind of surgical approach might be practiced by some surgeons, it has not been described well in the literature. In a series of 495 facelifts, the author found this “hybrid facelift” technique useful in 61 cases. (*Plast Reconstr Surg Glob Open* 2022;10:e4503; doi: 10.1097/GOX.0000000000004503; Published online 23 September 2022.)

INTRODUCTION

The volumetric approach to a facelift is mostly concerned with the treatment of volume deflation.¹⁻⁴ Understanding facelift anatomy and fat compartment anatomy is important and must be integrated into any approach used to treat the aging face.^{3,5,6}

The effectiveness of the different superficial musculoaponeurotic system (SMAS) surgical techniques was studied previously.⁷⁻¹⁰ Generally, surgeons choose to use one of the two concepts: SMAS plication or SMAS-ectomy/flap, for the entire procedure. The ancillary procedure, such as lipofilling, and fat removal are typically added to achieve the best results.¹¹⁻¹³

Deflated Face

SMAS plication can augment deflated areas such as the cheek and angle of the mandible. Adding fat grafting can typically improve the results.^{4,11,12}

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Full Face

Plication may lead to some deep tissue rotation¹⁴ that may translate into an overly augmented cheek or jawline. Although subcutaneous fat removal could reduce the resulting bulge, some surgeons may argue that other SMAS techniques can give a more predictable result.

SMAS-ectomy^{15,16} can reduce volume but may not offer sufficient mobilization of tissue. In our experience in overweight patients, SMAS-ectomy may lead to some degree of deep tissue rotation and an undesired bulge lateral to nasolabial fold mimicking plication but to a lesser degree.

Wide SMAS undermining seems to offer more freedom of tissue mobilization¹⁷ and reduction but is technically more demanding and may consume longer operative time. Therefore, some surgeons preserve this technique for those who present with a uniformly full face.

Mixed Picture (Deflation/Fullness)

Some patients present with fullness in one area, such as the cheek, and with deflation in another area (eg, over the angle of the mandible). In those patients, instead of performing plication, which may lead to undesired fullness and, instead of performing the more complex and

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time-consuming SMAS elevation and excision, we suggest using a hybrid of both techniques.

METHODS

This article aims to provide the initial description of a “hybrid” facelift. We reviewed a series of 495 patients who underwent facelifts over the past 5 years. Patients who present with a volume mixed picture (fullness in one area and deflation in another) were the candidates for this approach. The study was ethically approved, patients who were enrolled in the study were appropriately informed of the study and the surgical technique, and appropriate consents were accordingly taken.

The Hybrid Facelift

For the sake of simplicity, the facelift field is divided into two units: the upper unit, including the cheek and periorbital area, and the lower unit, which includes the jawline, the angle of the mandible, and the neck.

For Each Side of the Face

- Areas that require augmentation are addressed with plication.
- Areas that require volume reduction are addressed with SMAS undermining and resection (we prefer this over SMAS-ectomy).
- Submental liposuction, face lipofilling, and fat removal techniques are added as necessary and according to the surgeons’ preference.

Additional lipofilling can be added if needed. The author uses lipofilling for deflated temples and periorbital areas, mostly in the nasojugal groove. We do not typically use lipofilling for cheeks or jawline in the same operative setting, although we think it can be done.

Takeaways

Question: In facelift, can you describe an SMAS technique that is time-efficient and can treat both excessive fullness in one area (eg, cheek) and deflation in another (eg, lower third) simultaneously? What is the “hybrid” facelift?

Findings: Patients with mixed fullness deflation can benefit from the hybrid facelift. In comparison to plication only, it allows effective volume reduction in heavy faces, and in comparison to full SMAS elevation, it seems to save some operative time.

Meaning: Contrary to the current concept of choosing one SMAS technique over another in facelift, this article suggests blending different techniques and maximizing the benefit of each.

This approach is different from the current widely practiced approach in which the choice between SMAS plication and SMAS elevation is “either-or” and “all or none.”

Hybrid type A: upper SMAS excision and lower SMAS plication (See Video [online], which displays the important steps of the surgical technique. Both hybrid A and hybrid B are highlighted.)

In this scenario, the patient presents with heavy cheeks and a poorly defined volume-depleted jawline and angle of the mandible (Fig. 1A).

If submental liposuction is required, it is performed first. An oblique line is drawn on the SMAS extending from the zygomatic body toward the angle of the mandible. The line is extended 4cm inferiorly in a vertical fashion, anterior to sternomastoid muscle over the neck platysma.

The SMAS is incised starting from the zygomatic body and going inferiorly till 1 cm above the angle of the

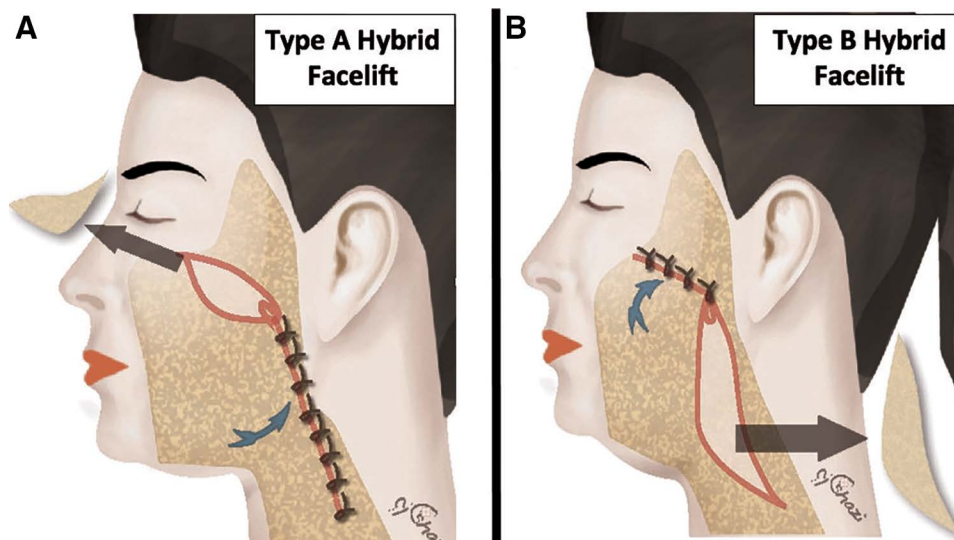


Fig. 1. The technique is illustrated. A, Patients with heavy cheeks are addressed with SMAS reduction in the cheeks only and plication in the rest of the face and neck. B, Patients with depleted cheeks and excessive fat in the submandibular area are addressed with cheek SMAS plication and SMAS excision over the angle of the mandible and neck areas.

Table 1. Results

Number of Facelifts	N = 495	
Average age	48.4	
Average BMI	28.4	
Additional submental liposuction	N = 278	
Average follow-up	8 months	
SMAS Technique	n	Average OR Time
Nonhybrid group	434	1 h 55 min
Plication only	312	2 h 45 min
Elevation and undermining only	122	2 h 10 min
Hybrid group*	61	
Type A	n = 19	
Type B	n = 42	
Complications†	n	(Of Which in the Hybrid Group)
Partial thickness skin loss	3	1
Full-thickness skin loss	2	0
Temporary nerve palsy	3	0
Permanent nerve palsy	0	0

*Type A Hybrid facelift: cheek SMAS undermining and excision and neck SMAS plication. Type B Hybrid facelift: cheek SMAS plication and neck SMAS elevation and excision. Please refer to the text and the video for more clarity and details.

†All partial and full thickness skin losses healed spontaneously. All nerve palsies were of marginal mandibular branch.

mandible. The SMAS of the midface is undermined and elevated until the zygomaticus major muscle. Buccal fat removal can be done at this stage. The SMAS is redraped, and excess SMAS fatty tissue is excised and SMAS is closed under tension. The rest of SMAS over the angle of the mandible and the neck is simply plicated using the standard technique to create a well-defined jawline and angle of the mandible.

Hybrid type B: upper SMAS plication and lower SMAS excision. (See Video [online], which displays the important steps of the surgical technique. Both hybrid A and hybrid B are highlighted.)

The patient presents with deflated cheeks, a heavy lower part of the face, and excessive volume at the angle of the mandible. This presentation also tends to include an excessive fat deposit in the submental and submandibular areas (Fig. 1B).

Submental liposuction is usually done first. A similar approach is used to mark the SMAS. SMAS incision starts 2–3 cm above the angle of the mandible and extends inferiorly over the neck's platysma marking. To avoid great auricular nerve injury, the incision is angled slightly medially, about 1.5 cm anterior to the sternomastoid muscle as it goes inferiorly. We suggest referring to the study by Narasimhan et al that highlighted important anatomic landmarks that help to avoid injuring the nerve.¹⁸ This is followed by wide platysma undermining over the neck and parotid areas. The SMAS in the cheek is simply plicated starting from the zygomatic body toward the angle of the mandible but stopping short of it to avoid having a bulge at the SMAS plication/excision junction. SMAS in the neck is redraped and tightened, and excess tissue is excised to fashion a satisfactory neck and jawline. The platysma is fixed to the mastoid prominence and along the lateral edge of the platysma.

RESULTS

In a series of 495 facelifts, we found this technique useful in 61 cases. Our initial outcomes are reported in Table 1. The average age was 48. About 96% of our



Fig. 2. Type A hybrid facelift is displayed. A, The patient presented with fullness in the upper half of the face and deflation of the lower half. Cheek SMAS elevation and excision helped to avoid overaugmenting the cheek. SMAS plication in the rest of the face along with submental liposuction helped to give a well-defined jawline and neck. No lipofilling was used in this case. B, Eight months after surgery. The author acknowledges the different photography settings.

patients were women. The average BMI of the study group was 28.6, which is slightly higher than the average BMI of the plication group (27.4) but less than the SMAS elevation group (30.7). One tangible benefit of this technique seems to be a possible reduction in operative time as shown. Complications are low and do not seem to be related to any particular technique. All nerve palsies were marginal mandibular branch and occurred in patients who received submental liposuction. Two of them are in the full face plication group and one in the full face SMAS undermining group. In the hybrid facelift group, there were no motor nerve palsies and no full thickness skin necrosis. In all groups, there were five cases of skin complications: three partial thickness skin slough and two full-thickness necrosis. Of those five cases, only one partial thickness skin slough that healed spontaneously occurred in the study group (in hybrid B group). A long-term objective analysis of the aesthetic outcomes remains to be done, but keeping in mind that the techniques used (SMAS plication and SMAS elevation) are known to be reliable, we do not expect any different results from what has been already published. A patient example is provided (Fig. 2).

CONCLUSION

In patients who present with mixed picture (fullness in one area of the face and deflation in another), we found combining more than one SAMS technique to be useful and time-saving.

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PATIENT CONSENT

The patient provided written consent for the use of her image.

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