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EDITOR'S INVITED COMMENTARY

Invited Discussion on: "Triple-S Lift for Facial Rejuvenation"

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The title of this article caused me slight confusion, as the name of the technique seems to refer to the S lift, which was published by Ansari and Saylan in the 1990s. But it seems that the concept is entirely different, not relying on purse-string sutures, and more a variation of the classical sub-SMAS face-lifting techniques.

The article requires some effort by the reader to understand the concept of the triple-S technique, not in the least as a consequence of sometimes particular phrasing and vocabulary. The technique described starts with a short sub-SMAS dissection until the anterior border of the masseter muscle. There is a logic in incising the SMAS 1 cm anterior to the tragus as the platysma-auricular fascia is very densely attached to the parotid fascia. Moving the incision even further anteriorly 25–30 mm from the tragus would probably be even better [1].

The dissection is followed by the placement of SMAS suspension sutures (called support system with ligatures) not at the edge of the dissected SMAS flap (referred to as "distal" in the text) but at the end of the sub-SMAS dissection. After piercing the SMAS from deep to superficial, the suture is brought further anteriorly and according to the drawing in Figure 3a the final bite seems to reach just underneath the non-undermined portion of the SMAS. The suture is taking a bite, laterally in the parotid fascia, and is then finally anchored to the platysma-auricular ligament. The free margin of the SMAS is then split into two segments, sutured separately further laterally to the temporal fascia and the mastoid periosteum, respectively.

In theory, this procedure could have more power than the traditional SMAS suspension, as the sutures are taking a bite in the SMAS very anteriorly, near the deformity. Indeed, the main disadvantage of a SMAS flap technique compared to, for instance, purse-string loop techniques is that the traction is exerted at quite a distance from the structure one intends to move (e.g., the nasolabial fold, or jowl or platysma). Purse-string loop techniques such as the MACS lift have their action literally at the site of the deformity, hence quite good effectiveness [2]. Similarly, SMASectomy and SMAS plicature techniques have their field of action very close to the deformity they intend to correct.

Nevertheless, the ligatures that the authors propose are typically cable sutures connecting a proximally fixed anchor point and a distal mobile point. As a chain always breaks at its weakest spot, the chances that the suture cheese-wires through the tissues early in the healing phase, are great, thereby reducing the lifting effect and longevity.

I have concerns about the proposed vector of action on both the SMAS and the skin. Even in the traditional SMAS flap techniques, the main vector of SMAS correction is more vertical than horizontal. The sutures 2, 3 and 4 of the "support system" are clearly oriented horizontally, as one

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can see on the intraoperative photograph in Figure 2 of the article. The horizontal vector contributes very little to the correction of the facial ptosis, which occurs in an anti-gravitational direction, vertically down. This correction, which may look acceptable in the early postoperative period, may appear to be aging poorly with the advent of a lateral sweep deformity. The skin is also redraped in a rather posterior direction, which may accentuate an unnatural windswept appearance [3].

The clinical images that are shown have too short a follow-up to demonstrate any of the classical flaws of obliquely oriented face-lifts. Six weeks is still in the wound healing phase, and 14 weeks is also too short to allow any clinical assessment. The one patient that is shown with a 2-year follow-up shows an acceptable correction of the submental area, but also disturbing horizontal traction shadows in the lower cheeks, which may be due to the horizontal vector of correction.

In the discussion which consists mainly of a review of the literature, some assumptions are made which are not entirely backed by scientific evidence or literature references. The claim that their technique "simulates and compensates for age-related changes in the face retaining ligaments" would deserve some elaboration about the mechanism of this action. The claim that "the SMAS flap has a greater mobility after detachment" is refuted by the work of Daniel Labbé, whose article the authors nevertheless have quoted [4]. SMAS detachment is not essential for its mobilization, and this is also corroborated by Brian Mendelson's work on the sub-SMAS spaces [1].

In summary, although the concept of "taking the action as close as possible to the deformity" with the sutures grabbing the SMAS as anteriorly as possible is sound, the use of cable sutures compromises the potential power and longevity of this procedure. It would be interesting to see a series of patients with a minimal follow-up of 8–12 months to have a better idea of the benefits and drawbacks of this technique. A longer follow-up of at least 5 years will show the aesthetic qualities and longevity of the proposed technique.

Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflicts of interest to disclose.

Ethical Approval This article does not contain any studies with human participants or animals performed by any of the authors.

Informed Consent For this type of study, informed consent is not required.

References

1. Mendelson BC, Freeman ME, Woffles W, Huggins RJ (2008) Surgical anatomy of the lower face: the premasseter space, the jowl, and the labiomandibular fold. Aesth Plast Surg 32:185–195
2. Tonnard P, Verpaele A, Monstrey S, Van Landuyt K, Blondeel P, Hamdi M, Matton GA (2002) Minimal access cranial suspension lift: a modified S-lift. Plast Reconstr Surg 1096:2074–2086
3. Verpaele A, Tonnard P (2008) Lower third of the face: indications and limitations of the minimal access cranial suspension lift. Clin Plast Surg 35:645–659
4. Labbé D, Franco RG, Nicolas J (2006) Platysma suspension and platysmaplasty during neck lift: anatomical study and analysis of 30 cases. Plast Reconstr Surg 117:2001–2007