Cosnetic Surgery Times.com Vol.8 No. 8

Facial Surgery

Where the Exchange on Aesthetic Perspective Begins

How to achieve a reliable midface lift

Endotine B fixation device allows for true, reproducible vertical procedure, M.D. says

By Randal D. Haworth, M.D., F.A.C.S.

CONTRIBUTING AUTHOR

Beverly Hills, Calif. — The midface has defied convincing and reliable surgical rejuvenation. The multitude of procedures surgeons offer for midfacial rejuvenation belie the fact that none are truly 100 percent reliable. Under gravity's inexorable influence, the face mainly ages via vertical descent. However, most techniques to date provide lift in a superolateral direction, a clear compromise in producing a convincing portrait of youth in its natural form.

Superolateral lifts involve elevating the deep portion of the malar fat pad towards the temporal area, generally in the subperiosteal plane. Fixation to the fascia intermedia is accomplished with either spanning sutures or an Endotine ST device (Coapt Systems). Unfortunately, patients can end up looking "pulled" with exaggerated canthal tilt and with overly imbricated malar fat pads imparting the presence disproportionately large implants. This look may persist for an ostensibly interminable period. Despite these concerns, I still feel that there is a place for superolateral lifting in our surgical armamentarium.

Midfacial ptosis causes, remedies

Certainly, genetics, age and environment all contribute to midfacial ptosis. The drama of this process is greatly influenced by the underlying bony landscape as "taller bones result in tighter skin."

The Endotine B midface lift offers unparalleled results in terms of natural esthetics and ease of reproducibility.

The malar fat pad gradually slides off the zygomatic prominence, lowering the lidcheek junction and settling to give rise to the nasolabial fold. As the inferior orbital rim becomes unveiled, the "tear trough" deformity emerges (consisting of the nasojugal groove medially and the palpebromalar groove inferolaterally) together with the illusion of an elongated lower eyelid. Malar crescents variably and asymmetrically appear.

Successful midfacial rejuvenation should address and reverse all of these aforementioned characteristics without distortion of surrounding anatomical structures. Logically, a vertical lift would be the best solution since it corrects the true dynamic pathophysiology of this vexing problem.

Vertical lifts

However, vertical lifts have had unpredictable degrees of long-term success. These have consisted of SOOF lifts in which the fibrofatty tissue deep to the orbicularis oculi is approximated under tension to the often flimsy periosteum of the bony orbit.

Other supposed "vertical lifts," consisting of full thickness cheek flap elevation to the temporalis fascia and periosteum of the lateral orbital rim, are not truly vertical. In fact, their vector of lift is still superolateral, but in a narrower, more rotational arc about the lateral canthal region. These operations are often difficult to reproduce and can involve a steep learning curve.

In my experience, the Endotine B device allows for a true vertical midface lift. The device consists of a multi-holed leash attached to a platform on which sit five superiorly angled tines. Unlike single-point suture fixation, Endotine multiple-point fixation ensures secure tissue grip and provides a broader base of elevation. Through its wider footprint, its elevation is more

Facial Surgery

evenly distributed, and consequent tissue distortion, asymmetry and tearing are minimized. Postoperative edema seems to be decreased as well, possibly due to less lymphatic congestion. The bioabsorbable device is a copolymer of polylactic and polyglycolic acid derivatives, taking six to 12 months to resorb. By then, an *in vivo* cicatricial response has gradually taken over to maintain the lift.

Performing the procedure

The procedure is performed through a standard subciliary blepharoplasty incision without an endoscope. A skin-muscle flap is raised, allowing entrance into the preseptal space via an "open sky" approach. Judicious fat excision may be performed. However, fat transposition techniques are theoretically redundant in successful vertical lifts. After dividing the arcus marginalis, the subperiosteal space is elevated from the nasomaxillary junction medially, the medial third of the zygomatic arch laterally and the gingivobuccal sulcus and masseteric fascia inferiorly. Of course, the inferior orbital neurovascular bundle is preserved. The Endotine B is positioned along the longitude of the midpupil and the tines are engaged under the bulk of the ptotic malar fat pad. While applying appropriate superior pull, symmetry is verified. This upward traction is maintained via a low profile absorbable screw secured through the leash of the device into the inferior bony rim. Drilling and tapping are made surprisingly easy with the supplied instruments.

If a concomitant lower blepharoplasty is indicated, I perform my definitive lower lid skin excision before the lift, resisting the





(Above, left and right) Two patients five weeks after Endotine B midface lift, endoscopic browlift, lower blepharoplasty and lip augmentation with fat.





Patient before (left) and three-and-a-half months after (right) Endotine B midface lift, endoscopic brow lift, lower blepharoplasty, upper lip lift, lower lip V-Y plasty and fat enhancement. Note lower lid shortening and tear trough effacement.

Photos: Randal D. Haworth, M.D., F.A.C.S.

temptation to later excise further skin that has been recruited superiorly. This "extra" skin has a remarkable propensity to contract and redrape smoothly in the postoperative period.

Performing this vertical midface lift is simple, reproducible and quick, taking about 40 minutes when combined with a lower blepharoplasty. Since the midfacial tissue along with the orbicularis oculi are elevated and secured to immobile bone, longevity is theoretically high while the incidence of lower lid malposition should be

very low. Consequently, prophylactic canthal support is generally not needed if one pays close attention to middle lamellar integrity and hemostasis.

The Endotine B midface lift offers unparalleled results in terms of natural aesthetics and ease of reproducibility. While further long-term studies are needed, early results indicate that it will represent a very significant advance for midfacial rejuvenation. **CST**

Disclosure: Dr. Haworth reports no financial interest in Coapt Systems.

© Reprinted from COSMETIC SURGERY TIMES, September 2005 AN ADVANSTAR PUBLICATION Printed in U.S.A.

Copyright Notice Copyright by Advanstar Communications Inc. Advanstar Communications Inc. retains all rights to this article. This article may only be viewed or printed (1) for personal use. User may not actively save any text or graphics/photos to local hard drives or duplicate this article in whole or in part, in any medium. Advanstar Communications Inc. home page is located at http://www.advanstar.com.



Coapt Systems, Inc. 1820 Embarcadero Road Palo Alto, CA 94303 Telephone:800-963-7670 www.coaptsystems.com