Techniques to Address the Malar Fat Pad

According to the author, suture elevation of the malar fat pad is a simple, safe, and reliable procedure to reestablish a youthful malar contour, shorten the lower eyelid, and improve the nasolabial crease. Access for incision placement may be prehairline, subciliary, or intraoral, depending on patient characteristics and the goals of surgery. (Aesthetic Surg J 2005;25:66-68.)

The malar fat pad, which is the focus of the central third of the face, descends with aging (Figure 1). Gravity causes sagging of the facial soft tissues in a vertical direction. To restore the aging face to its youthful shape, the midface must be elevated in a vertical vector.¹ This will achieve a natural-looking result that avoids the lateral sweep of more conventional face lifts that rely on lateral vector tissue repositioning.² Various techniques have been described to address the malar fat pad and rejuvenate the central third of the face, including dissection in the subcutaneous, sub-SMAS, and subperiosteal planes.³,⁴ Access for incision placement may be prehairline, subciliary, or intraoral. Endoscopy may also be a helpful adjunct for the minimally invasive approach. Each approach has advantages and disadvantages.

Standard prehairline incisions provide excellent exposure and significant elevation of the malar fat pad. However, with this approach, resultant scars are more visible (Figure 2). Therefore, it is best to reserve this approach for patients aged 55 or older who, in addition to well-tolerating the pre-hairline incision, will usually have excess skin that requires resection.

The subciliary incision facilitates use of the subcutaneous or subperiosteal approach (Figure 3).⁵ Either of these approaches will effectively elevate the malar fat pad and improve the lower lid-midface junction, recruit additional lower eyelid tissue, and effectively correct mild lower lid ectropion or laxity. To minimize canthal changes, the subcutaneous approach requires that the incision be carried further, laterally. The subperiosteal approach can result in changes of the palpebral fissure necessitating a canthoplasty. Canthoplasty may also be necessary with the endoscopic subperiosteal approach.

The intraoral approach offers only modest improvement but avoids any visible scars. This method is very effective in younger patients seeking a subtle improvement to address the early signs of facial aging.

Preferred Technique

Through the prehairline incision, use a blunt needle driver to spread and dissect through the subcutaneous layer to the lateral border of the malar fat pad. Continue dissection inferiorly, superficial to the malar fat pad, and almost to the nasolabial fold. Expose the malar fat pad medially to a line drawn inferiorly from the lateral canthus. Then grasp the malar fat pad with 2 clamps and pull it in a vertical direction to elevate the corner of the mouth and soften the nasolabial fold.

While maintaining the vertical elevation with the clamps, suspend the malar fat pad with 2 horizontal mattress sutures, clear nylon 4.0, to the superficial temporal or temporoparietal fascia at the level of the lateral eyebrow. I recommend that you place these stitches in front of the hairline to avoid injury of the frontal nerve. If there is skin dimpling over the cheek, smooth it out by bluntly freeing the skin overlying the malar fat pad with a clamp. In addition, tighten the orbicularis oculi muscle at its lateral margin.

At the level of the lateral canthus, secure a horizontal mattress suture of clear nylon 4.0 to the superficial temporal, or temporoparietal fascia in a lateral and slightly elevated direction. Because this face lift relies on malar fat pad suspension, the skin can be redraped, trimmed, and inset without any tension. It is helpful to use gentle traction in the vertical vector while draping the cheek skin, but do not use lateral traction.
Figure 1. Cadaveric dissection delineating the upper prominence and lower portion of the malar fat pad just below the level of the dermis.

Figure 2. Preauricular dissection offers excellent exposure to the malar fat pad via the subcutaneous dissection plane.

Figure 3. Subciliary incision offers exposure to the malar fat pad through a limited incision.

Figure 4. A, Preoperative view of a 50-year-old woman. B, Postoperative view following lower lid blepharoplasty and midface suture suspension demonstrates limited elevation of the midface but improvement of the lower lid cheek transition and shortening of the lower lid.
In younger patients (less than 55 years), redundant skin is less of a problem and aging changes are primarily limited to the soft tissues. A subciliary blepharoplasty incision will permit elevation of the midface in the subcutaneous plane, superficial to the malar fat pad, so that the fat pad can be grasped and suspended with 1 or 2 sutures. Compared with more aggressive approaches, the elevation is less dramatic; however, since skin resection is not required and these patients are less likely to tolerate a prehairline incision, this approach provides a good alternative (Figure 4).

**Conclusions**

Repositioning the midface structures is critical in facial rejuvenation. Elevating the malar fat pad is a straightforward and effective means of creating a youthful midface contour. It reliably reshapes the malar eminence, softens the nasolabial folds, and rejuvenates the lower eyelid. In addition, the pre-hairline scar is inconspicuous, especially in older patients. Combining malar fat pad elevation with other facial restorative procedures provides a global facial rejuvenation without a notable increase in complications.

**References**


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