Lower Blepharoplasty with Non-suture Fat Repositioning

John R. Burroughs, Richard L. Anderson, and John D. McCann

The trend for over a decade has been toward less fat removal and more fat repositioning to restore the youthful cheek-lower eyelid convex continuum. This alone may not be sufficient for optimal lower eyelid rejuvenation as many patients also require lateral canthal resuspension, midface elevation, skin tightening by lower eyelid TCA peeling (25–35 %), or more rarely skin removal. To improve lower eyelid wrinkles, we recommend a lower eyelid TCA peel (25–35 %), which is safer than skin removal and also helps pigmentation changes.

Through a transconjunctival incision, placed approximately at the midpoint between the inferior border of the tarsus and the fornix, the septum can be accessed (Fig. 71.1). In cases with a prominent "tear trough" deformity, opening of the septum and fat capsules should be done inferiorly at the orbital rim so that the fat will drape inferiorly and help fill the "tear trough" (Figs. 71.2 and 71.3). Fat removal should be conservative and usually only involves the more superior fat that prolapses after the capsules are opened (Fig. 71.3). Excessive

lateral fat pads must be more aggressively sculpted, and the lower eyelid trough deformity is usually less pronounced laterally. To maximize symmetry,

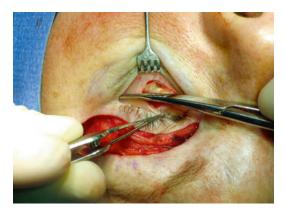


Fig. 71.1 Making of the transconjunctival incision with Stevens scissors at the mid-fornix



Fig. 71.2 Opening of the orbital septum along the inferior orbital rim, allowing fat to prolapse inferiorly

J.R. Burroughs, MD, PC (⋈) 111 East Polk Street, Colorado Springs, CO, USA e-mail: john@drjohnburroughs.com

R.L. Anderson, MD, FACS AO Surgical Arts, Salt Lake City, UT, USA

J.D. McCann, MD, PhD Center For Facial Appearances, 9350 South 150 East, Suite 400, Sandy, UT 84070, USA e-mail: doctorface@gmail.com



Fig. 71.3 Opening of the fat capsules along the inferior orbital rim. Conservative fat sculpting of superiorly prolapsing fat may then be performed



Fig. 71.4 Beginning release of the preperiosteal orbicularis attachments along the inferior orbital rim by elevating (not cutting) with Stevens scissor tips

once the fat has been sculpted and repositioned, the lower eyelid should be inspected for symmetrical improvement. Gentle ballottement of the upper eyelids can accentuate any prominent areas that may require additional sculpting or fat repositioning. We do not suture the fat pads inferiorly, but one may suture the transposed fat in its new position with 6-0 Prolene or gut a few millimeters below the tear trough for a few days. The key components are to release the preperiosteal attachments at the inferior orbital rim (Fig. 71.4) and opening the orbital septum at the inferior orbital rim. This allows the fat to drape into the hollow tear troughs. The orbicularis retaining ligament and the orbicularis attachment points along the inferior orbital rim region are best released by



Fig. 71.5 Utilization of Sayre elevator to further release orbital rim preperiosteal orbicularis attachments, allowing inferiorly prolapsing orbital fat to fill the tear trough deformity



Fig. 71.6 Complete release with Sayre elevator after initial elevation with Stevens scissor tips to approximately 1 cm below the orbital rim. The cheek fat pad and SOOF have been undermined supraperiosteally, thereby enabling midface elevation that will be suture fixated to the orbital rim periosteum and temporalis fascia prior to incision closure

blunt dissection and elevation of the skin and the underlying tissues with the combination of Stevens scissors and a Sayre elevator (Figs. 71.5 and 71.6). This release is carried below the rim (about 1 cm), which will help allow the fat to fill the "tear trough" deformity. Lateral undermining and release of the orbital malar ligament combined



Fig. 71.7 Utilization of Sayre elevator through the transconjunctival incision to mobilize and elevate the SOOF and lateral eyelid-cheek complex supraperiosteally. This undermining joins that done through the lateral upper blepharoplasty incision (shown in Fig. 71.6). Caution is advised to avoid tearing the zygomaticofacial neurovascular complex

with the upper blepharoplasty dissection for elevation of the lateral canthus and SOOF provides opportunity for more aggressive midface elevation (Fig. 71.7). After ensuring there are no sites of active bleeding, the conjunctiva is reapproximated with forceps and usually closed in the midline with a single 6-0 plain gut to avoid conjunctival adhesions. Excess lower eyelid skin removal, if needed, can be performed as a secondary procedure. The vast majority of patients do not require skin removal. When done simultaneously with an upper blepharoplasty incision, the lateral upper incision can be carried more inferior than usual; so once midface elevation is done, this extra recruited tissue does not cause bunching laterally. The combination of TCA peel and lower eyelid fat repositioning with lateral canthopexy and/or lateral SOOF and midface elevation provides an excellent aesthetic result and has high patient acceptance with few risks.