

The Five-step Lower Blepharoplasty Technique Refined

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INTRODUCTION

Lower lid blepharoplasty is one of the most complex procedures performed by plastic surgeons. Here we provide a comprehensive and systematic approach to the lower eyelid, which is critical for lower lid blepharoplasty success.

PREOPERATIVE PLANNING

A thorough ophthalmic history must be taken, specifically as it relates to the use of corrective lenses, glaucoma, allergic reactions, excess tearing, and dry eyes.¹ No peri-orbital aesthetic surgery should take place within 6 months of refractory surgery. Evaluation should include facial proportions, skin type, skin excess, snapback, palpebral fissure size/shape, fat herniation, tear trough, canthal position, extraocular muscle function, Bell's phenomenon, levator function, margin reflex distance, brow and eyelid ptosis, and globe position relative to malar prominence. (See **Video 1 [online]**, which displays facial analysis.)

OPERATIVE TECHNIQUE

Step 1: Deep Malar Fat Compartment Augmentation

Fat is injected into the deep malar space from the alar base as an entry point, using a 2-mm blunt single side-hold cannula approximately one fingerbreadth below the orbital rim, correcting malar deflation and the inverted-V deformity.^{2,3} (See **Video 2 [online]**, which displays deep malar fat compartment augmentation.)

Step 2: Transconjunctival Removal of Lower Lid Fat (If Indicated)

Only a small amount of fat is removed, proceeding from the medial to the lateral side, in most cases. In general, the amount of fat removed decreases as you proceed from the lateral to the medial. The lateral deep lower eyelid fat tends to be fuller, more robust, and more vascular. The lateral fat pad is also most likely to be missed.^{2,3}

(See **Video 3 [online]**, which displays transconjunctival removal of lower lid fat.)

Step 3: Lateral Retinacular Canthopexy

An absorbable 5-0 Vicryl (Ethicon, Inc., Somerville, N.J.) suture is used for the lateral canthopexy to prevent scleral show and lower-lid malposition without affecting the long-term lateral canthal shape. A 5-0 Mersilene (Ethicon, Inc.) suture may be necessary in men with secondary lax eyelids, in cases of dry eyes, and in negative vector patients.^{2,3} (See **Video 4 [online]**, which displays lateral retinacular canthopexy.)

Step 4: Skin Pinch Removal

Fine forceps are used to pinch the excess skin, creating a linear partition to be excised. Curved scissors are then used to carefully excise the skin, maintaining the underlying orbicularis muscle.^{2,3} (See **Video 5 [online]**, which displays skin pinch removal.)

Step 5: Fractionated Fat Injection and Release of the Orbicularis-Retaining Ligament

Fat is harvested from the inner thigh with a small multiport cannula. The harvested fat is centrifuged for no more than 1 minute, with the supernatant and infranatant discarded. The remaining fat is then run through a tulip connector at least 50 times to allow for fractionation. This leads to fragmentation of adipose tissue structure. Using a fine 1-mm cannula with a single port, fractionated fat is injected above the periosteum and below the muscle with 50% overcorrection. The medial portion of the orbicularis-retaining ligament needs to be released from its maxillary attachments to blend this transition zone. Release is gently performed laterally using the same fine 1-mm cannula in a blunt manner in the supraperiosteal plane.^{4,5} (See **Video 6 [online]**, which displays fractionated fat injection and release of the orbicularis-retaining ligament.)

CONCLUSION

A comprehensive and systematic ophthalmic history and examination is critical in establishing goals and formulating a precise surgical plan for lower blepharoplasty.

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PATIENT CONSENT

Patients provided written consent for the use of their images.

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