

Comments on “Ptosis: An Underestimated Complication after Autologous Fat Injection into the Upper Eyelid”

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Li et al¹ published an intriguing article in the July 2015 issue of *Aesthetic Surgery Journal* entitled “Ptosis: an underestimated complication after autologous fat injection into the upper eyelid.” In 2012, I described my experience with fat grafting as a means to repair upper eyelid ptosis without an incision in the upper eyelid.² Specifically, I observed improvement in upper eyelid ptosis when fat was injected into the retro-orbicular and preseptal spaces. My ophthalmologist colleagues and I hypothesized that increased brow support can lift the upper lid, and expansion of the preseptal space can place tension on the orbital septum and induce posterior displacement.² These forces are translated to the superior transverse ligament (Whitnall’s ligament) and the levator attachments to the tarsus. Mancini et al³ found that injection of filler into the plane of the postseptal levator and Muller’s muscle or into the pretarsal space lowers the eyelid for patients with cicatricial or paralytic lagophthalmos, respectively.

Li et al¹ note that “hollow, creased, and empty eyelids present as a sign of aging.” Applying this reasoning, I routinely perform fat injections into the brow and upper lids to restore youthful volume and contour (Figures 1 and 2).² However, the sunken deformity of the upper lid associated with fat atrophy also may have functional sequelae. Li et al¹ found that some patients required only surgical removal of injected fat, whereas others required advancement of the levator aponeurosis.

Li et al¹ assert that “plastic surgeons themselves and the techniques they employ are the main cause of ptosis as a complication following autologous fat injection into the

eyelid” and that “the entry point is usually the lateral side of the pretarsal folds.” With these statements, the authors suggest that the commonly employed techniques of retrograde medial-to-lateral injection combined with higher digital pressure to initiate fat flow are responsible for the preponderance of “fat lumps in the nasal region.”¹ I agree that graft survival and the 3-dimensional aesthetic of fat grafting are highly technique dependent. However, I routinely employ an injection port at the head of the eyebrow while my nondominant hand elevates and flattens the eyelid on the superior orbital rim. With the eyelid flat, injections with a blunt cannula are safe, reversible, and deliver more accurate results. Overinjection can be corrected immediately by aspiration in the same retro-orbicular plane. A corneal shield may allow for additional surgical control, thereby minimizing or eliminating the risk of globe trauma.

Fat injection into the sulcus of the upper eyelid aesthetically rejuvenates the lid and can improve contour and position of the eyebrow when combined with sub-brow injection. For patients with upper eyelid ptosis, this procedure may yield wider, more alert-appearing eyes. Moreover, this approach may obviate open surgery and avoid the frustrations of Hering’s law of equal innervation.

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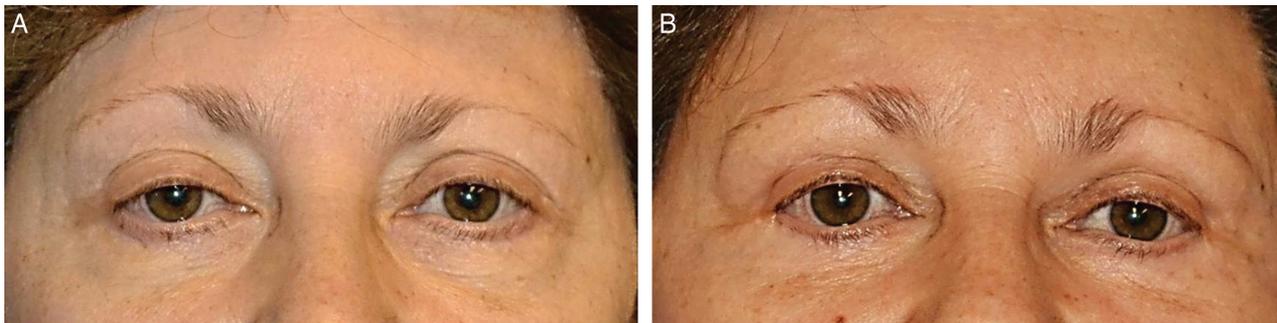


Figure 1. (A) This 65-year-old woman had undergone blepharoplasty of the upper lid 23 years before she presented to our office for facial rejuvenation. She underwent facelift, blepharoplasty of the lower lid, and fat grafting of the entire face. Specifically, 6 mL of fat was grafted to each brow and sulcus of the upper eyelid. (B) Sixteen months postoperatively, ptosis of the right and left upper eyelids has improved by approximately 2 mm and 1 mm, respectively.



Figure 2. (A) This 67-year-old woman had undergone blepharoplasty of the upper lid approximately 12 years before she presented to our office for facial rejuvenation. She underwent facelift and fat grafting of the entire face. Specifically, 3 mL of fat was grafted to each sulcus of the upper eyelid. (B) Eighteen months postoperatively, ptosis of both upper eyelids has improved by 1.5 to 2.0 mm.

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