

COSMETIC SURGERY

IN THE GLAUCOMA PATIENT



No strict contraindications exist, but attention to fine detail is required.



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Periorcular plastic surgeries are the most commonly performed aesthetic procedures in the world. Similar to glaucoma, cosmetic concerns are more common in the aging population. Both medical and surgical glaucoma therapy can pose challenges for cosmetic intervention. Not only can cosmetic surgery potentially have consequences on the fragile ocular health of glaucoma patients, but also the therapies utilized for glaucoma treatment may have an impact on aesthetics and cosmetic surgery outcomes.

MEDICAL GLAUCOMA PATIENTS

Allergic eyelid dermatitis, eyelid malposition, prostaglandin orbitopathy, and nasolacrimal stenosis are known complications of topical glaucoma therapy. Allergic dermatitis commonly causes aesthetic concerns because of erythematous, thickened, and redundant skin, which may induce eyelid malposition. Periocular effects of allergic dermatitis can include simulated or worsened ptosis, dermatochalasis, ectropion, and eyelid retraction.¹ If the offending agent is stopped, the dermatitis typically resolves slowly, and occasionally the

AT A GLANCE

- ▶ Medical and surgical glaucoma therapy can pose challenges for cosmetic intervention.
- ▶ Thorough knowledge of ophthalmology, the ocular surface, periocular anatomy, eyelid mechanics, and the patient's previous glaucoma treatments can allow for a safe, effective aesthetic enhancement.

cosmetic concerns vanish. Surgical intervention in patients with unrecognized, active dermatitis may hamper wound healing, leading to increased infection or scarring.

Long-term topical prostaglandin use can cause increased horizontal eyelid tightness, fat atrophy, marginal entropion, upper eyelid ptosis, lateral canthal deformity, marginal blepharitis and thinning of the eyelid margin (Figure 1).² Without recognition of this syndrome, cosmetic therapy may lead to postoperative eyelid malposition, lagophthalmos, and exposure symptoms. In some cases, abstinence from the prostaglandin may allow for partial reversal of findings and improve postoperative periocular surgery outcomes.

If the periocular effects of prostaglandin use are recognized prior to aesthetic surgery, planning may include less skin resection, canthal repositioning, fat transplantation, or limited doses of aesthetic injectable medications such as botulinum toxin and filler.

POSTSURGICAL GLAUCOMA PATIENTS

Surgical intervention for glaucoma can include anything from trabeculectomy, to tube shunt placement, to cataract surgery with adjuvant treatments. Regardless of the surgical intervention performed, patients with glaucoma have some form of compromise to their ocular integrity that should be considered with any elective periocular surgery.

Upper and lower eyelid malposition after ocular surgery are known consequences and can include upper eyelid ptosis, eyelid retraction, horizontal laxity, lower eyelid entropion, and ectropion (Figure 2). In practice, the upper eyelid is the most variable with ocular drainage procedures such

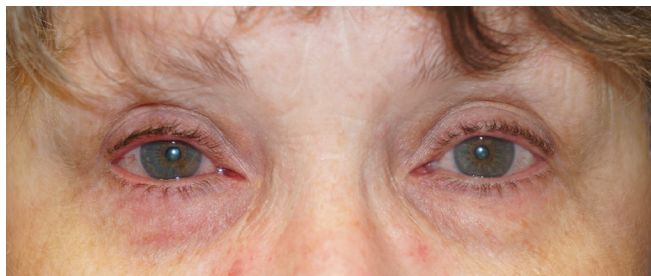


Figure 1. Chronic right-sided prostaglandin orbitopathy with horizontal shortening of palpebral fissure, upper eyelid ptosis, anterior lamellar erythema, and marginal irregularity.



Figure 2. Left upper eyelid retraction after trabeculectomy, with right upper eyelid pseudoptosis.

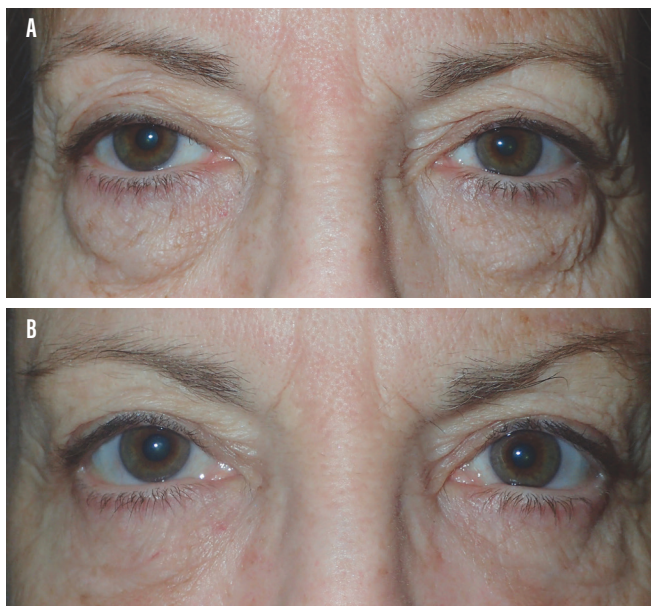


Figure 3. Preoperative (A) and postoperative (B) appearances of a glaucoma patient who underwent bilateral cosmetic upper eyelid blepharoplasty, right upper eyelid ptosis repair, and lower eyelid transconjunctival, fat-repositioning blepharoplasty with laser skin resurfacing.

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as trabeculectomy. In some cases, upper eyelid ptosis may be self-limited; therefore, prompt intervention may not be indicated. Additionally, in patients with uncontrolled glaucoma, upper eyelid surgery may not be advisable, especially if glaucoma surgery is impending.

Following any ocular surgery, aponeurotic ptosis can occur through a variety of mechanisms and may require upper eyelid ptosis repair. In general, upper eyelid ptosis repair can be performed through external aponeurotic advancement or internal Mueller muscle resection techniques. With internal ptosis repair, a possible relative contraindication may be considered in postsurgical glaucoma patients, especially in the setting of a thin bleb following trabeculectomy. Upper eyelid retraction may be misunderstood as contralateral pseudoptosis or worsened upper eyelid dermatochalasis, and these entities are treated differently to prevent ocular exposure.³

CONCLUSION

To our knowledge, no strict contraindication exists for any cosmetic therapy (dermal fillers, botulinum toxin, blepharoplasty, etc.) in patients with glaucoma. Recognition of finer details of the periocular changes caused by glaucoma treatment is required for innocuous surgical enhancement. Thorough knowledge of ophthalmology, the ocular surface, periocular anatomy, eyelid mechanics, and the patient's previous glaucoma treatments can allow for a safe, effective aesthetic enhancement (Figure 3). ■

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