Upper Eyelid Blepharoplasty: The Evaluation

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Understanding the patient's desires and expectations, whether functional, cosmetic, or both, is a critical element in eyelid surgery. The history and preoperative decision-making process is every bit as important as surgical technique.

1. The personalized interview of the patient by the surgeon is essential. During the visit, give patients a handheld mirror so they can point out their concerns and expectations.
2. Determine how and why the upper eyelids are bothering the patient. Find out what surgery they have had in the past. Are these cosmetic concerns or visual obstruction interfering with activities?
3. Obtain a detailed medical history, with particular attention to allopathic as well as homeopathic medications and supplements. Beware of drugs that interfere with platelet aggregation (aspirin, clopidogrel, ibuprofen) and the clotting cascade (heparin, warfarin).
4. Perform a complete ocular surface and adnexal exam, including visual acuity, slit-lamp exam, basic secretor tear testing or tear meniscus inspection, and confrontational and Goldmann or automated visual fields, and then repeat with the eyelid skin taped up.
5. Beware of warning signs during the exam: dry eye, corneal staining, poor Bell's phenomenon, history of refractive surgery, or lagophthalmos.
6. Photos are critical. Get at least full-face, downgaze, and side views. Close-up eye photos can be helpful, but with a modern digital camera, these can be obtained from the full-face photos.
7. Detailed measurements will differentiate ptosis, dermatochalasis, and brow ptosis. The upper margin-reflex distance (MRD1) indicates the distance from the center of the pupil to the eyelid margin, which will indicate significant ptosis if 2.5 mm or less. MRD1 must be measured without brow effort, as many patients with ptosis will compensate by elevating their brows. The margin-fold distance is the space between the lashes and the fold of upper eyelid skin and gets smaller (or negative) with worsening dermatochalasis and brow ptosis. See Fig. 14.1.

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Fig. 14.1 Margin fold distance (*MFD*): preoperatively the MFD is essentially zero, and after bilateral upper eyelid blepharoplasty, the MF is markedly improved

Fig. 14.2 Brow ptosis: significant upper eyelid crowding with the non-hair-bearing brown skin encroaching on the lash line

8. Special attention must be given to brow position. Brow position also plays a significant role in eyelid crowding and reduction of MFD. See Fig. 14.2. Measurement of the vertical skin distance (VSD), the distance between the lashes and the inferior border of the brow, can be helpful in determining the contribution of excess eyelid skin to eyelid crowding. In general, a VSD of greater than 20 is indicative of dermatochalasis. If a patient has a VSD of about 20 with significant eyelid crowding, their complaints are most likely primarily due to their brow. See Fig. 14.3. Patients frequently have difficulty understanding the contribution of the brow to eyelid crowding and often have the misconception that their complaints and symptoms are solely due to excessive eyelid skin. It is helpful to have the patient hold a mirror while the examiner simulates a brow lift. We cannot improve brow ptosis with a blepharoplasty procedure, and attempts to do so will cause complications. The eyebrow skin looks different than the eyelid skin. It has subcutaneous fat, has larger pores, and often is hair bearing (though hair may be absent). The eyelid skin is thin, is non-hair bearing, and lacks subcutaneous fat. Be sure to look at the position of the lower border of the *actual* brow skin ("plucked" or not). If the lower border of the brow is significantly below the superior orbital rim, this must be noted. The patient still may be a blepharoplasty candidate, but it must be documented that he or she understands the limits of this procedure and possible need for future brow lift.
9. MFD and eyelid crowding may also be affected by a low or poorly formed eyelid crease.
10. Note that a unilateral brow elevation may indicate levator weakness on that side.
11. In a patient with fullness above the supratarsal crease, check photos in youth as they may obtain a look (hollowing) that they never had.
12. Make sure to ask the patient to smile and note the wrinkling at the lateral canthi. They may

Fig. 14.3 Brow ptosis: notice the marked improvement in MFD following endoscopic forehead lifting without blepharoplasty

think this will disappear with surgery, an effect that only botulinum toxin can achieve.

13. In addition to the unexpected surgical risks, discuss usual postoperative expectations with the patient. These include swelling and bruising, numbness of the eyelids and lashes, mild redness of the incision, scaring, and possible soreness.