Periorbital tissues are a keystone in facial beauty and a representation of youth. These tissues are typically the first to exhibit signs of aging because of the effects of animation, gravity, and sun exposure. The upper eyelid is a critical component of this anatomical region, and upper lid blepharoplasty should be an integral component of facial rejuvenation. The aesthetically pleasing and youthful upper eyelids are full, with a defined tarsal upper lid crease and with smooth, taut pretarsal and preseptal skin. The upper blepharoplasty is a critical component of any facial rejuvenation procedure. This five-step procedure provides key steps in the correction of upper lid age-related changes and provides a reliable and reproducible method of achieving excellent results. Furthermore, the addition of fractionated fat restores volume and youthfulness of the upper lid, and also improves the skin quality of the upper lid. (Plast. Reconstr. Surg. 141: 1144, 2018.)

PATIENT EVALUATION

The evaluation of a patient for upper blepharoplasty should include a general history and physical examination. The periorbital examination should include visual testing, Schirmer test, pupillary response, extraocular muscle function, Bell phenomenon, palpebral fissure size and shape, ptosis evaluation (marginal reflex distance-1), and volume and skin assessments.1–5

PREOPERATIVE MARKINGS

Preoperative markings are performed with the patient in the upright position and in neutral gaze. The brow is positioned appropriately before marking. The supratarsal fold is located at 8 to 9 mm above the ciliary margin in women and 7 to 8 mm above the ciliary margin in men.4 A mark is placed just inferior to this fold. The upper marking must be at least 10 mm from the lower edge of the brow. Medially, the markings should not extend beyond the medial canthus, and laterally, depending on the amount of skin laxity, the shape of the skin excision may be lenticular or trapezoid in shape.
**SURGICAL TECHNIQUE**

Subcutaneous injection of 3 to 5 ml of 1% lidocaine with 1:100,000 epinephrine with a 27-gauge, 1½-inch needle is performed 7 minutes before incision. (See Video, Supplemental Digital Content 1, which demonstrates a five-step upper blepharoplasty, available in the “Related Videos” section of the full-text article on PRSJournal.com or, for Ovid users, available at http://links.lww.com/PRS/C722.)

**Step 1: Lowering the Supratarsal Fold**

The first step of the technique is critical for the restoration of a youthful upper lid crease. The incision is usually placed 1 mm inferior to the current supratarsal lid crease or 7 mm above the ciliary margin with a no. 15 blade. Laterally, this incision takes a lazy-S–shaped course, falling into a lateral orbital skin crease, to allow greater skin excision of the lateral upper lid, where most of the redundancy is found.

**Step 2: Skin Excision**

The shape of the skin excision is dependent on the age of the patient and the amount of skin redundancy. Using the presurgical markings, the upper incision is made approximately 10 mm from the brow at a vertical point directly above the lateral limbus with a no. 15 blade and the skin is excised with fine curved scissors. (Note: if there is excess fat in the medial fat compartment, the deep fat is excised.)

**Step 3: Lateral Orbicularis Window**

Most patients with lateral fullness have laxity and redundancy of the lateral orbicularis oculi muscle. Depending on the amount of redundancy, using fine curved scissors, a minimal portion of the orbicularis muscle is excised. This also further defines the supratarsal fold. Of note, if performing a concomitant lower blepharoplasty, the lateral canthopexy is performed during this step. The canthopexy is performed with a single 5-0 Vicryl (Ethicon, Inc., Somerville, N.J.) suture grasping the lower lateral retinaculum and passed through the periosteum of the inner upper orbital rim just lateral to the lateral limbus. The suture is tensioned depending on the laxity of the lower lid, and the lateral canthus should be placed close to the patient’s youthful eye appearance, which can be determined using old photographs of the patient.

**Step 4: Differential Skin Closure**

Hemostasis is obtained with a pinpoint insulated cautery. The skin is reapproximated in a differential manner because of the inherent difference in thickness between the brow and lid skin. A running subcutaneous 6-0 Prolene (Ethicon) suture is placed, taking a deep path on the lid skin and a superficial path on the brow skin to compensate for the difference in skin thickness. This is followed by interrupted simple 6-0 nylon sutures placed in a similar differential manner, with superficial passes of the needle in the thicker brow skin and deeper bites in the thinner lid skin. The differential closure has provided further camouflaging of the incisions in the senior author’s (R.J.R.) experience.

**Step 5: Volume Restoration**

Finally, volume restoration of the upper orbit is performed using fractionated fat. The fat is

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**Video.** Supplemental Digital Content 1 demonstrates a five-step upper blepharoplasty, available in the “Related Videos” section of the full-text article on PRSJournal.com or, for Ovid users, available at http://links.lww.com/PRS/C722.
harvested at the beginning of the case from the medial thighs and centrifuged at 1200 rpm for 1 minute as described previously. The fat is then passed between two syringes through a small Tulip Emulsifier (Tulip Medical Products, San Diego, Calif.) 50 times. Then, using a 14-gauge needle, a small stab incision is made in the upper lateral brow and the fractionated fat is injected into a submuscular plane in the upper lid and just above the periosteum near the orbital rim using an 18-gauge, 1½-inch blunt cannula (Mircrins; Eriem Surgical, Lake Forest, Ill.). This step improves the volume of the upper lid, and the stem cells in the fractionated fat may provide dermal regeneration, which has been noted by the senior author in clinical follow-up. Furthermore, the fractionated fat has a minimal propensity for lumps.

CONCLUSIONS

The upper blepharoplasty is a critical component of any facial rejuvenation procedure. This five-step procedure provides key steps in the correction of upper lid age-related changes and provides a reliable and reproducible method of achieving excellent results. Furthermore, the addition of fractionated fat restores volume and youthfulness of the upper lid and also improves the skin quality of the upper lid.

REFERENCES