Upper Blepharoplasty

7

Sarah A. Eidelson and Seth R. Thaller

Indications

1. Cosmetic concern including:
   (a) Dermatochalasis (excess skin)
   (b) Fat herniation
   (c) Brow ptosis
   (d) Blepharoptosis [1]
2. Visual field defects
3. Entropion

Essential Steps

Patients taking anticoagulants should ideally be held for 7 days pre-procedure.

Preoperative Markings

1. Identifying the area of desired lid crease that is individualized to patient's anatomy. For the inferior margin of incision, Caucasian women should be marked approximately 8–10 mm above upper eyelid margin (lash line) at the mid-pupillary axis [2]. Men should be marked at 8–10 mm. Asian patients should be marked at 4–6 mm.
2. Lateral edge of marking should not extend beyond the level of lateral canthus. If significant redundant tissue is present, the lateral incision can be extended up to 5 mm but patient must be made aware of potential result on scar position.
3. Medial marking should be roughly 5 mm lateral to the medial canthus. It should not reach the level of the medial canthus. Connect these inferior markings along a curvilinear pattern running in line to the natural eyelid crease to form an ellipse.
4. For the superior incision, mark 20 mm above the upper eyelid margin at the mid-pupillary axis. Create a similar curvilinear marking that mirrors the inferior incision.
5. Connect these lines. Ensure adequate tissue remains to allow eye closure without tension [1]. This is determined by having the patient close and open eyes while area of planned excision should be grasped with a smooth forceps. Plastic surgeon's goal is to leave patient without resulting lagophthalmos. Lateral corners should connect at roughly 30–40° [3].
6. Repeat above steps in contralateral eye and check for symmetry of markings before incision.

S.A. Eidelson, M.D., B.S. (✉)
Department of General Surgery, Jackson Memorial Hospital, Miami, FL, USA
e-mail: sarah.eidelson@jhsmiami.org

S.R. Thaller, M.D., D.M.D., F.A.C.S.
Division of Plastic Surgery, Department of General Surgery, University of Miami/Jackson Memorial Hospital, Miami, FL, USA
e-mail: sthaller@med.miami.edu

T.A. Tran et al. (eds.), *Operative Dictations in Plastic and Reconstructive Surgery*,
DOI 10.1007/978-3-319-40631-2_7

Intraoperative Details

1. Establish the sterile field with ophthalmic strength Povidone-Iodine solution.
2. Slowly inject 4–5 cc of 1 % Lidocaine with 1/100,000 epinephrine to subcutaneous tissue with 25-gauge needle to form wheal within area of excision of upper lid similar to hydro-dissection for harvesting a full thickness skin graft. Wait 10–12 min to form adequate analgesia and vasoconstriction.
3. Using a #15C blade make a medial to lateral skin incision along the line of inferior marking while holding gentle digital retraction.
4. Follow by making an incision along the superior marking.
5. Using handheld pointed tip electrocautery, dissect through skin to the level of orbicularis oculi muscle starting at the superficial incision. Care should be taken not to violate level of levator aponeurosis.
6. Fat resection is generally discouraged unless central or medial fat pads are significantly herniated upon gentle pressure of the globe. If present, conservative resection using electrocautery can then be performed.
7. Using curved iris scissors, remove upper lid skin en bloc with tips facing upwards. May send for pathology for gross evaluation only.
8. Irrigate gently with 10 cc of normal saline and ensure adequate hemostasis with handheld electrocautery before placing sutures.
9. Begin closure by placing 6-0 or 5-0 nonabsorbable suture from the superior preseptal orbicularis to the inferior orbicularis and levator aponeurosis at the mid-pupillary axis. Orbital septum or tarsus should never be sutured. Place 4–6 fixation sutures, as the orbital septum does not need to be completely closed [4].
10. Once eyelid crease is recreated, a running 6-0 plain gut or prolene suture may be used to close incision medially to laterally.
11. Gently push down and ensure that eyelid comes down easily.
12. Place Steri-strips across incision.
13. Gross visual acuity and extraocular movements should be evaluated at the end of procedure.

Postoperative Care

1. Keep head of bed elevated at least 30° to decrease swelling.
2. Twenty minutes cold compress, as needed, to wound post-op day 1.
3. Can shower within 48 h postoperatively.
4. Apply ophthalmic antibiotic ointment twice daily once Steri-strips fall off.
5. Avoid makeup products for at least 2 weeks.
6. Exercise and contacts can be resumed 2 weeks postoperatively.
7. Avoid direct sun exposure for 4–6 weeks postoperatively.

Possible Complications

1. Asymmetry
2. Retrobulbar hematoma causing visual disturbances (any acute worsening of eye pain postoperatively should be evaluated immediately)
3. Dry eyes
4. Eyelash loss
5. Ectropion
6. Corneal abrasions
7. Lagophthalmos
8. Ptosis
9. Swelling and/or bruising for 2–3 weeks
10. Chemosis

Operative Dictation

Diagnosis: Bilateral cosmetic dermatochalasis/ possible visual field defect

Procedure: Upper blepharoplasty

Indication

This is a __/__ (Age/gender) with a history of dermatochalasis resulting in bilateral visual field defects. This has been confirmed both by preoperative visual field studies and visual improvement upon taping of her lids. She is now admitted for upper lid blepharoplasty. The proposed procedure, surgical options, limitations, incision locations, risk, benefits, and alternatives are explained to the patient in detail and he/she understands and agrees to the procedure outlines.

Description of the Procedure

The patient was brought into the operating room in satisfactory condition and placed in supine position. Patient's periorbital area was prepped and draped in standard sterile fashion using ophthalmic strength povidone-iodine. A final time-out was performed verifying patient's name, medical record number, procedure, and operative site. This was confirmed with surgical staff. Markings were made with calipers at 8 mm above lash line at the mid-pupillary axis. Lateral marking was made at the level of the lateral canthus in the plane of patient's natural eyelid crease. Medial most marking was made 5 mm lateral to medial canthus also in line with patient's natural eyelid crease. These three markings were connected to form curvilinear pattern. For the superior marking of excision, a mark 20 mm above lash line in mid-pupillary axis was made and connected to form elliptical pattern of excision. Zone of excision was gently grasped with a smooth forceps to ensure patient was left without significant resulting lagophthalmos. We repeated same steps for contralateral eye and ensured symmetry between our preoperative markings that were confined in calipers. We then slowly injected 1 % Lidocaine with 1/100,000 epinephrine to subcutaneous tissue with 25-gauge needle to form wheal within area of excision of upper lid and allowed adequate time for analgesia and vasoconstriction to right eye. While using gentle digital retraction, we used a #15C blade to make a medial to lateral incision over our preoperative markings down to the level of the orbicularis oculi muscle. We then repeated this maneuver to the superior marking. We removed the full thickness skin en bloc with curved iris scissors and sent specimen for gross pathology only. We irrigated area gently with 10 cc normal saline and ensured adequate hemostasis with handheld Bovie electrocautery. Once hemostasis was ensured, we began to re-approximate preseptal orbicularis oculi using four 5-0 nonabsorbable fixation sutures. Once we recreated eyelid crease, we ran 6-0 Prolene running subcuticular sutures medially to laterally. We then performed the above procedure on the left side. We ensured both eyelids opened and closed easily without significant lagophthalmos at the end of procedure. We placed Steri-strips across incision. Gross visual acuity and extraocular movements were assessed and determined to be intact at the end of procedure. Sponges and instrumentations were counted and correct. Patient was taken to recovery unit in stable condition without complications.

References

1. Few Jr J, Elis M. Chapter 8: Blepharoplasty. In: Neligan PC, editor. Neligan's plastic surgery. 6th ed. London: Elsevier Saunders; 2013.
2. Dolan R. Chapter 22: Functional and aesthetic blepharoplasty. In: Dolan RW, editor. Facial plastic, reconstruction and trauma surgery. New York: CRC Press; 2003.
3. Gonnering R. Chapter 10: Upper eyelid blepharoplasty. In: Tse DT, editor. Color atlas of oculoplastic surgery. 2nd ed. Philadelphia: Lippincott; 2011.
4. Brown B. Chapter 7: Blepharoplasty. In: Levine MR, editor. Manual of oculoplastic surgery. 2nd ed. Boston: Butterworth-Heinemann; 1996.