Chapter 161
Internal Lateral Browpexy

Larissa Kadar Ghadiali and Bryan J. Winn

Indications

The internal lateral browpexy is well suited for patients with mild amounts of lateral brow ptosis particularly in patients undergoing upper eyelid blepharoplasty [1–4].

Essential Steps

1. Mark the upper eyelid crease (*mark the skin for an upper eyelid blepharoplasty*), the area of the lateral brow requiring lift and the supraorbital notch
2. Infiltrate local anesthetic into the upper eyelid, internal lateral brow, and periosteum of the superolateral orbital rim below the lateral brow
3. Make the eyelid crease incision (*perform an upper eyelid blepharoplasty*)
4. Dissect through orbicularis muscle and sub-brow fat to expose frontal periosteum at the superior lateral orbital rim
5. Secure the subcutaneous tissues of the brow to the frontal periosteum
6. Close the skin

L. K. Ghadiali (✉)
Department of Ophthalmology, Loyola University Medical Center, Maywood, IL, USA

B. J. Winn
Department of Ophthalmology, University of California San Francisco, San Francisco, CA, USA
e-mail: bryan.winn@ucsf.edu

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Complications

- Infection
- Bleeding/hematoma
- Pain
- Poor cosmesis
- Asymmetry
- Overcorrection/undercorrection
- Suture dehiscence/erosion

Template Operative Dictation

Preoperative diagnosis: (*Right/Left/Bilateral*) brow ptosis

Procedure: (*Right/Left/Bilateral*) internal lateral browpexy

Postoperative diagnosis: Same

Indication: The patient is a ___-year-old (*male/female*) with mild (*right/left/bilateral*) lateral brow ptosis (*and upper eyelid dermatochalasis*) leading to obstruction of peripheral vision. A decision was made to proceed with internal browpexy (*and upper eyelid blepharoplasty*) to correct the mild brow ptosis (*and dermatochalasis*). The patient was informed of the risks, benefits, indications, and alternatives of the procedure, and informed consent was obtained.

Description of the procedure: The patient was identified in the holding area, and a marking pen was used to mark the operative eye(*s*). The upper eyelid crease was marked with a marking pen approximately _9_ mm above the margin (*using a skin pinch technique a conservative amount of skin to be excised during the blepharoplasty was determined*). The optimal vector for brow fixation was also determined and marked above the lateral brow. The patient was escorted into the operating suite and placed in the supine position. Tetracaine eye drops were instilled into both eyes. The patient's face was prepped and draped in the usual sterile fashion for oculoplastic surgery. IV sedation was administered by the anesthesia service. A surgical timeout was performed in accordance with hospital policy, verifying the correct patient, procedure, site, positioning of the patient, special equipment, and safety precautions. The area of the upper eyelid, internal brow, and periosteum of the frontal bone superior to the lateral orbital rim was infiltrated with a 50/50 mixture of 2% lidocaine with epinephrine 1:100,000 and 0.5% Marcaine for local anesthesia. A corneal protective shield was placed in the eye(*s*).

A scratch incision was made along the skin of the eyelid crease (*and semilunar line above the crease*) with a Colorado needle on monopolar cautery (*#15 Bard-Parker blade*). (*The skin [and orbicularis muscle] was removed with a Colorado needle on monopolar cautery [Westcott scissors]*). The lateral brow was pulled

superiorly such that the wound was now above the orbital rim and dissection was carried out down through the orbicularis and sub-brow fat to find the plane between the periosteum and the deep galea aponeurotica of the sub-brow fat. Once this was found, a pocket was created with the Sayre periosteal elevator superior to the brow cilia to release the gliding plane. A *4-0 polypropylene* suture was then passed through the brow from the skin into the pocket at the level of the lateral brow cilia to mark the planned brow fixation point. The suture was then passed in a mattress fashion through the periosteum approximately *1* cm above the superolateral orbital rim and anchored to the deep galea aponeurica at the fixation point of the original percutaneous suture. The suture was tied down in a permanent fashion and anchored the brow into the normal anatomic position, correcting the preexisting ptosis. A second mattress suture was placed in a similar fashion adjacent to the first. The eyelid crease (*blepharoplasty*) incision was then closed with interrupted *6-0 polypropylene* sutures. The corneal shield was removed.

If procedure was performed bilaterally: *Antibiotic ointment was placed on the wound, and the same procedure was then performed for the contralateral eye*.

Following the procedure, antibiotic ointment was placed in the eye, and the patient was escorted to the postoperative care area, where (*he/she*) remained for approximately 45 min before being discharged to the care of a responsible adult.

References

1. Nerad JA. Techniques in ophthalmic plastic surgery. Philadelphia: Saunders Elsevier; 2010.
2. Glass LR, Lira J, Enkhbold E, Dimont E, Scofield S, Sherwood P, Winn BJ. The lateral brow: position in relation to age, gender and ethnicity. Ophthal Plast Reconstr Surg. 2014;30(4):295–300.
3. Tyers AG, Collin JR. Colour atlas of ophthalmic plastic surgery. 3rd ed. Boston: Butterworth-Heinemann/Elsevier; 2008.
4. McCord CD, Doxanas MT. Browplasty and browpexy: an adjunct to blepharoplasty. Plast Reconstr Surg. 1990;86(2):248–54.