

Chapter 124

Direct Brow Lift

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Abstract Patients should be evaluated and deemed appropriate for such surgical intervention. Brow ptosis that obstructs the visual axis, causes visual disability and affects activities of daily living, or cosmetically unacceptable appearance are candidates for this procedure. The choice of technique for brow lift should be discussed with the patient and the appropriate procedure tailored to the individual patient's needs and preferences. Patients should be educated about the risks and benefits of the procedure, including alternatives.

Keywords Brow ptosis • Direct browplasty • Direct brow lift • Direct brow ptosis repair • Direct brow lift

Indications

Eyebrow ptosis causing obstruction of the visual axis and causing difficulties with activities of daily living. Suprathreshold Humphrey visual fields demonstrated a greater than 30% improvement with elevation and taping of the redundant tissue.

Essential Steps

1. Transfer patient to operating room
2. Measure and mark patient's natural brow position and outline an ellipse of skin to be excised
3. Subcutaneous infiltration of local anesthetic
4. Incision along marked ellipse above brow

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5. Dissect through skin, subcutaneous tissue, and orbicularis
6. Hemostasis
7. Deep plane and subcutaneous tissues closed in layers
8. Skin closed with vertical mattress and running sutures
9. *If bilateral procedure*: identical procedure on contralateral brow

Complications

- Infection
- Bleeding/hematoma
- Pain
- Exacerbation of dry eye symptoms
- Poor cosmesis
- Visible scarring
- Undercorrection
- Overcorrection
- Asymmetry
- Exposed suture
- Need for further procedures
- Retrobulbar hemorrhage
- Hypoesthesia of forehead
- Transected brow cilia

Template Operative Dictation

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

Procedure: (*Right/Left/Bilateral*) direct brow lift

Postoperative diagnosis: *Same*

Indication: This ____-year-old (*male/female*) has significant (*right/left/bilateral*) brow ptosis obstructing the visual axis and causing difficulties with activities of daily living. Suprathreshold Humphrey visual fields demonstrated a ____ % improvement with elevation and taping of the redundant tissue. The risks, benefits, and alternatives to the procedure were discussed with the patient including the risk for infection, bleeding, pain, exacerbation of dry eye symptoms, prominent scarring, hair loss, alteration of brow contour, asymmetry, and need for further procedures. Afterwards, the patient elected to undergo the procedure and signed the required consent forms.

Description of the procedure: The patient was identified in the holding area, and the (*right/left*) eye was marked with a marking pen. The patient was brought into the operating room where the (*right/left*) eye and associated adnexal structures were sterilized with 5% betadine ophthalmic solution. The patient was draped in the

standard sterile fashion for oculoplastic surgery. A time-out was then performed confirming the correct patient, site, surgery, and any known drug allergies.

The superior margin of the (*right/left/both*) supra-brow elliptical incision was marked with a violet marking pen to approximate the desired height and contour of the brow(s) following surgery. This was done by manually raising the eyebrow to the desired position, and positioning the marking pen at the superior edge of the brow hairs. The brow was then allowed to fall to its original position while passively marking the skin. The inferior margins were marked at the superior margin of the eyebrow hairs. ___ % lidocaine (*with/without*) epinephrine (1:100,000) was infiltrated subcutaneously.

On the (*right/left*) side, a #15 blade was used to incise skin, subcutaneous tissue, and orbicularis muscle, following the margins and beveling cephalad in attempt to avoid transecting hair follicles. Special care was taken when extending the incision medially to prevent injuring the supraorbital and supratrochlear neurovascular bundles. The resulting ellipse was undermined and excised, and hemostasis was achieved with a bipolar wetfield electrocautery. The deep plane and subcutaneous tissues were then closed in layers with buried, interrupted 5-0 Vicryl sutures. The skin was then closed with # vertical mattress sutures, followed by a running 6-0 nylon suture for maximum wound eversion.

If contralateral brow was done—Attention was then directed towards the contralateral brow, where an identical procedure was performed. No involvement of the neurovascular bundles was encountered. The wound was reapproximated using the method previously described.

The drapes were removed and ophthalmic ointment was applied. The patient tolerated the procedure well without any intraoperative or immediate postoperative complications. All needle and sponge counts were correct at the end of the procedure. The patient was then taken to the recovery room in stable condition and will be seen in the oculoplastics clinic in 1 week. The patient will apply frequent ice packs on the eyelids for 48 h, and abstain heavy lifting, straining, or use of blood thinners. The patient was instructed to return to the emergency room immediately if any loss of vision or deep orbital pain is noted.