MINIMUM ACCESS ENDOSCOPIC BROW LIFT WITH DEEP TEMPORAL FIXATION

**Abstract**

The face is the focal point of human beauty. Although various factors influence facial beauty, the aging process is the most common aspect prompting surgical intervention. Aging is a dynamic and continual process. Hereditary and environmental factors (e.g sun, wind, movement) are the main determinate of aging. In addition, cigarette smoking can accelerate the aging process. Patients who present for an aesthetic facial improvement, in many instances, are not aware of the factors that lead to an aged or "tired" appearance. Most of the time they focus on the midface and periorbital changes. It is the clinical responsibility of the surgeon to recognize forehead and brow ptosis and demonstrate to the patient how it can be improved. A forehead lift procedure results in several improvements to the aging face. It raises the eyebrow to a more youthful level, ameliorates the transverse and vertical wrinkles, and opens up the eyes. These changes work very well in complementing the facelift

**Patients and Methods:**

Between October 2020 to June 2022, twenty patients with ages ranging between (35 years – 60 years) were undergone endoscope temporal brow lift at Al-Shaheed Ghazi Al-Hariri hospital and burn center at Baghdad medial complex. Most of our patients were female (18 female versus 1 male). We selected those patients who presented to us with complaining of lateral brow ptosis or those patients who had normal eyebrow position but desire to elevated their lateral eyebrow we excluded those patients who had tattoed eyebrow, medial eyebrows ptosis, patients who had filler or botox to their eyebrow within last 6 months, patients who had previous eyebrow or browpexy procedure, and those patients who had unrealistic expectation. All of our patients were subjected to complex preoperative assessments including history and physical examination. History was focusing on the patients desire position of the eyebrow, and this was demonstrated to the patient by using of the mirror with manually elevating the eyebrow to reveal the favorable effect of brow elevation to patients. Also in history, we report any functional complain of lateral eyebrow ptosis in terms of affecting the visual field

**Results:**

Our results were assessed both objectively and subjectively. Objective evaluation were done by comparison the preoperative and postoperative measurements. Mean preoperative nasal ala to lateral eyebrow distance was 66.1mm which was increased up to 69.5mm at 3 weeks after the operation. Mean preoperative lateral canthus to the lateral eyebrow was 15.6mm which increased up to 17.1mm at 3 weeks after the operation. In 18 of our patients, the postoperative elevation was maintained, while in 2 patients the eyebrow position was descended down to the supraorbital margin, those two patients were already have eyebrow ptosis below their supraorbital margin, so they didn’t request further surgery.

Subjected evaluation depended on patients' satisfaction with the result of the operation. All of our patients were pleased with the improvement in their brow position long-lasting results were seen in a majority of our patients. All of our patients who had already eyebrow ptosis were reported improvement of their visual field with lightening of lateral upper eyelid fullness. Most of our patients reported no discomfort during the operation. We reported no intraoperative complications like sentinel vein or zygoma atemporal nerve injury. The postoperative recovery period was smooth with no significant hematoma, seroma, an bruising. Only one patient had postoperative ecchymosis swelling that was lost for only 2 weeks.

No major or minor postoperative complications were seen like wound infection, wound dehiscence except 2 cases of neuropteran frontal nerve paralysis, alopecia, or hypertrophic scar. All of our patients had symmetrical position eyebrows.

**Conclusion and Recommendation:**

Endoscopic temporal brow lift is an effective reproducible technique that can provide proper and long-lasting lateral eyebrow elevation with limited tissue damage and a short recovery period together with minor postoperative complications. However, the procedure needs long learning curve.

It is recommended to be used for mild-moderate.