Procedure Guidelines for Upper Eyelid Plastic Surgery (Blepharoplasty) using Radiofrequency

Indications / Contraindications

The objective of performing upper eyelid surgery (blepharoplasty) is to correct the loosening of skin (dermatochalasis) over the prolapsing fatty tissue and the periorbital folds. If indicated, low eyebrows may have to be lifted at the same time (eyebrow lift). Using the radio frequency technique for the performance of blepharoplasties enables the surgeon to make particularly fine incisions, work with high precision and cause minimal bleeding. These benefits shorten the OP time and the postoperative trauma.

Patient Preparation

The anatomy of the orbits (eye sockets), eyebrows, periorbital regions and the upper and lower eyelids must be examined and documented using photographic images. In this examination, special attention must be paid to the symmetry of the eyelids and eyebrows. Postoperative asymmetries may be more apparent. Pseudoptosis, ‘false drooping eyelid’ due to eyebrow ptosis should be excluded, i.e. it should be considered in the OP planning (combination of eyelid surgery and eyebrow lift).

Upper eyelid surgery is usually performed under local anesthesia (e.g. using 1% Xylonest® plus adrenalin 1:200 000). Before local anesthesia and after skin disinfection (e.g. with Octenisept® and makeup removal, the surgeon marks the incision line in upright position using a fine marker.

If the upper eyelid fold is well-defined, the lower incision will run slightly above the upper eyelid fold. In case the upper eyelid fold does not exist and must be newly defined, the distance between the lower skin incision and the upper lid should be 8 mm without fail. If required, the incision may be extended from the outside past the medial lacrimal punctum without extending it to the thick skin of the nasal slope. W-plasty may be performed in cases of pronounced skin excess (Fig. 1). The lateral incision must be extended into a crow’s feet fold, which is located about 5 mm above the outer eye corner. The incision should not extend past the lateral orbital margin. The amount of tissue to be resected is determined as follows: Using blunt forceps, the skin of the closed upper eyelid is gathered to the extent that the eyelid just starts to open. In the process, the forceps are placed causally in the new eyelid fold. Then the upper margin of the lancet-type skin excision is marked with a pen.

Intervention

The respective skin area is excised using the short ARROWtip™ micro-dissection electrode (e.g. REF: 360321), (Fig. 2). The settings of the CURIS® RF generator can be adjusted to the incision speed. The electrode should glide through the tissue without any resistance. The output for the incision process may have to be adjusted. Immediately after the incision, bleeding is stopped using the fine bipolar SuperGliss® forceps (e.g. REF 780148SG) to minimize hematoma formation. As a rule, a narrow strip of orbicularis oculi muscle should also be removed (Fig. 3). This can also be done using the ARROWtip™ electrode. Alternatively, the muscle tissue can be “shrunk” by way of bipolar coagulation. In the event a fat prolapse was diagnosed before surgery, bulging fatty tissue is removed using e.g. small scissors while light pressure is exerted on the globe of the eye (Fig. 4). The bulging fatty tissue is removed only after careful bipolar coagulation of all vessels to prevent a retrobulbar hematoma. As a rule, the incision is closed using monofilament 6-0 thread for an intradermal suture.

Postoperative Treatment

If at all possible, the patient should lie flat for several hours after surgery while every hour the surgical site is cooled for 15 minutes with a cooling aggregate to prevent edema and hematoma formation. The suture thread may be removed 7 - 8 days after surgery.

Disclaimer: These procedure guidelines have been carefully researched and compiled with the help of specialist physicians. They are not meant to serve as a detailed treatment guide. They do not replace the user instructions for the medical devices used. Sutter accepts no liability for the treatment results beyond legal regulations.

Settings of the CURIS® RF Generator (REF: 36 01 00-01)

<table>
<thead>
<tr>
<th>Setting</th>
<th>Output (watts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First dermal incision using the ARROWtip™ Monopolar CUT 1</td>
<td>15</td>
</tr>
<tr>
<td>Skin preparation with the ARROWtip™ Monopolar CUT 2</td>
<td>21</td>
</tr>
<tr>
<td>SuperGliss®: PRECISE</td>
<td>23</td>
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</tbody>
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Other accessories: Monopolar handpiece (REF: 360704), cable (REF: 360238), single-use patient plate (REF: 360222)