

Preoperative Marking to Approximate Forehead Rhytids for Precisely Camouflaging Scars

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Surgical Challenge

Camouflaging suture lines on relaxed skin tension lines (RSTL) is an important principle to improve cosmetic outcomes after reconstructive surgery.¹ The forehead has many horizontal rhytids allowing placement of incisions along RSTL.² However, the edema and muscle drooping caused by local anesthesia during Mohs micrographic surgery (MMS) may fade frontal and glabellar lines, impairing their visualization prior to repair. Furthermore, local anesthetic impairs muscle movement not allowing rhytids to be “reproduced” and marked. Therefore, suture lines leading to scars may not be camouflaged in the rhytids.



Figure 1. Forehead and glabellar rhytids marked prior to local anesthesia. Bilateral advancement flap with incision lines precisely drawn within premarked rhytids, followed by sutured result of advancement flap (Photos: Used with permission from the patient).

Solution

Prior to local anesthesia and tumor removal, we mark forehead and glabellar rhytids adjacent to the tumor with a surgical pen (Figure 1). In addition to the horizontal lines, oblique and vertical ones may be marked because flap incisions and cutaneous standing cones may be placed on them. During the surgical stages of MMS, the marks may be reinforced to ensure they remain easily visible after complete tumor removal. When planning the repair, the pen marks allow an accurate placement of the incisions along the rhytids and their precise realignment, an essential step during forehead repair. Flap incisions and removal of standing cutaneous cones may be planned accordingly and camouflaged on oblique-vertical lines. Preoperative marking of anatomic boundaries and subunits is a common practice for surgeries on the perioral area because of the significant distortion caused by local anesthetics. The technique may be applied to forehead rhytids in select patients.

In summary, preoperative marking of rhytids facilitates camouflaging of suture lines on the forehead and glabella.

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