Posterior Neck Lift

Posterior neck lift, which combines anterior platysmaplasty and anterior and lateral neck lift, is a good alternative to a full or lower face lift for patients with minimal or no jowl sagging. It may be combined with neck lipoplasty, serial platysma notching, expanded polytetrafluoroethylene neck sling, and chemical peel or laser. Scars, especially in women, are easily hidden by the occipital hairline. (Aesthetic Surg J 2004;24:155-158)

Posterior neck lift is a new procedure that combines anterior platysmaplasty with a lift of the anterior and lateral sides of the neck. The incisions are made behind the ears, on the hairline. The platysma neck muscle and the skin are pulled separately. This technique can also be combined with neck lipoplasty, serial platysma notching,1 and expanded polytetrafluoroethylene (ePTFE) neck sling. This “indirect” posterior neck lift does not require expensive or special instrumentation. Recovery time is short, and the scars, especially in women, are easily hidden by the occipital hairline and are often almost imperceptible.

The technique is a good alternative to lower face lift or platysmaplasty, especially in patients in whom there is minimal or no sagging of the jowls.

Posterior neck lift is an appropriate technique for:
• Young patients who desire to correct neck laxity but want to avoid visible scars.
• Patients who are interested in improving the neck only.
• Patients with sun-damaged skin who also undergo TCA peel. The posterior neck lift can be easily combined with chemical peels or laser treatment.
• The older patient who has already had a face lift and now has recurrent neck laxity. Instead of a secondary face lift, the posterior neck lift, performed with the patient under local anesthesia, can be used to correct the problem, avoiding lengthy recovery and the risks of anesthesia.
• A man who wants improved neck and jaw contour, especially when the procedure is combined with ePTFE neck sling. Men are excellent candidates for this surgery because male neck skin is thicker and more elastic than female neck skin.

The major advantages of this technique:
• Quick recovery of 5 to 7 days compared with the 14 to 21 days required to recover from a neck or lower face lift.
• No preauricular or temporal hair-bearing incisions; scars are nearly imperceptible, behind the ears and close to the hairline.
• Minimal hair loss because the incision is made along the hairline.

The disadvantages:
• Scar formation is more vigorous than in other neck incisions as a result of the traction of the wound sites.
• Results in patients with fatty necks are unsatisfactory.

Surgical Technique

Posterior neck lift consists of the following steps:
1. Local anesthesia and hydrodissection of the neck with the use of tumescent solution.
2. Molding of the neck to improve distribution of the tumescent solution, resulting in improved vasoconstriction.
3. Lipoplasty of the neck.
4. Undermining of the neck skin with fixation of the muscle layer to the periosteum of the mastoid bone.
5. Skin excision and closure with traction of the anterior neck skin.
6. Reston foam dressing (3M Pharmaceuticals, St. Paul, MN) of the neck for 2 or 3 days with an elastic wrap.

I use classic tumescent solution to anesthetize the

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Injecting large amounts of tumescent solution (120 to 180 mL) subcutaneously will achieve the necessary hydrodissection, as well as separation of the platysma and skin from the vessels, muscles, and nerves, thereby minimizing serious injury to these structures.

I perform traditional submental lipoplasty with small cannulas (1.8 and 2.4 mm) in both the subcutaneous and subplatysmal planes by way of a small submental incision. I use a Saylan cannula (KMI, Inc., Anaheim, CA) in the superficial fat layer above the platysma. For larger fat deposits and deeper layers, such as the subplatysmal plane, I prefer suctioning with a 14-gauge Becker cannula (Wells Johnson Co., Tucson, AZ). After suctioning the anterior neck, I direct a 1.8-mm cannula toward the mandibular rim to carefully reduce any fatty accumulation in this area.

After infiltrating the mastoid region with tumescent solution or 1% lidocaine with adrenaline, I make a slightly concave oblique incision at the hairline behind the ear. After surgery, the incision will appear straight as a result of skin traction (Figure 1). I then undermine the retroauricular skin from the mastoid bone and the underlying muscle (Figure 2). Afterward, I undermine further with a Toledo V Dissector (Tulip Medical, Inc., San Diego, CA) or a straight Metzenbaum scissors (Mopec, Inc., Detroit, MI) with the tips slightly open (Figures 3-6). It is important to remain superficial and to avoid the fossa jugularis with its attendant vessels.

Even with tumescent anesthesia hydrodissection, there is a danger of injury to the jugular vein and thyroid artery. The great auricular nerve should also be visualized and protected. Next, I undermine a second short layer consisting of platysmal muscle and fascia colli.

After the skin excision, I suture the flap of platysma and fascia colli to the periosteum of the mastoid bone with nonreabsorbable suture material such as Ethibond 3-0 (Ethicon, Inc., Somerville, NJ) while simultaneously achieving the necessary pulling and traction of the entire neck fascia and platysma. I complete subcutaneous closure with Vicryl 4-0 suture (Ethicon) to bury the Ethibond suture, then close the skin with 4-0 Ethibond mattress sutures. Drainage of the neck lift wound is advisable in all cases. Posterior neck lift can be combined with ePTFE neck sling, serial platysma notching, and chemical peeling of the anterior neck with 20% to 30% TCA, which rejuvenates anterior neck skin and improves overall results. An adjustable ePTFE sling can be adjusted through a small incision behind the left ear months or even years after the original surgery. If neck contour is unsatisfactory soon after the procedure, a correction can be performed in min-

**Figure 1.** A concave retroauricular incision is made close to the hairline, over the mastoid of the occipital bone.

**Figure 2.** Undermining of the anterior neck.
utes, with the patient under local anesthesia, through retightening and refixation of the sling. Sagging submandibular glands, which are frequently visible after submental lipoplasty, can also be elevated with the ePTFE neck sling.

Results

I performed posterior neck lift in 24 patients with an average age of 56 years between 1999 and 2002. These included 3 men (12.5%) and 21 women (87.5%). One case of infection (4.1%) occurred in this group with use of the ePTFE sling; the sling was removed 6 days
after surgery, and the infection resolved without sequela. The other 23 cases (91.6%) had satisfactory results. In 5 cases (20.8%) we used an ePTFE neck sling. In 14 cases (58.3%) we applied "serial platysma notching." Results are shown in Figures 7 and 8.

References

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