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The Minimal Facelift: Liposuction of the Neck and Jowls

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Abstract. We have used blunt liposuction for removing excess fat from the neck and jowls since 1983 with generally good results and few complications. Under local anesthesia with Valium and ketamine sedation and the use of the super-wet technique, and by using special precautions to avoid the complications of prominent platysmal bands, wrinkling of the neck, and salivary gland prominence, carefully performed liposuction to the neck and jowls has been shown to be a safe and dependable procedure with good results, and may delay or obviate the need for a facelift.

Key words: Liposuction—Neck and jowls—Platysmal bands—Neck wrinkling—Salivary gland prominence

Background

Since the development of blunt liposuction by Illouz in 1978 [1,2], this method has been used virtually from head to toe with dependable results in removing subcutaneous fat for contour irregularities [3]. We have used this technique in the neck and jowls since 1983 with generally good results and few complications. The important points of leaving a few millimeters of undisturbed superficial fat, determining the function of the platysmal bands, and using small (3 mm or less) diameter cannulas has enabled us to avoid most complications and produce dependable reshaped contours.

Materials and Methods

All of our liposuction procedures are performed under local anesthesia with Valium and ketamine sedation [4] and with the super-wet technique [5-8]. We mix a Ringer's lactated solution with Xylocaine with epinephrine, 1%: 100,000, and dilute it approximately 6:1 so that we have one-sixth of 1% and 1:600,000. This is then infiltrated with a Tulip infiltrating device [9] with the holes near the tip. An incision is made beneath the chin or just behind each ear to give access to the entire neck and jowl area. We usually infiltrate about 200-400 cc to this area. Suction is then carried out either with the Tulip syringe method [9] or with the standard machine with a 3-mm or smaller cannula. We are careful to always use a to-and-fro motion with the cannula (never side-to-side), and to maintain the hole away from the surface of the skin to avoid scraping out all of the subcutaneous fat from the skin. At the end of the procedure, the wounds are either closed with a single buried stitch of 5-0 Vicryl and/or reinformed with Suture Strips [10]. We then place the patient in an elastic neck band for 48 h.

Case Reports

Patient 7 is a 36-year-old female who has had liposuction to her cheeks and neck (see Figs. 1A,B).

Patient 2 is a 28-year-old female who has had liposuction only to her neck (see Figs. 2A,B).

Patient 3 has had liposuction to her neck and cheeks, as well as a rhinoplasty (see Figs. 3A-D).

Patient 4 is a 29-year-old mother of two. She has had rhinoplasty where we decreased the size of her nose and reshaped the tip, and liposuction to her neck and cheeks. She weighs about the same in both pictures (see Pigs. 4A,B).

Patient 5 is a 32-year-old executive who has had liposuction to the cheeks and neck only (see Figs. 5A,B).

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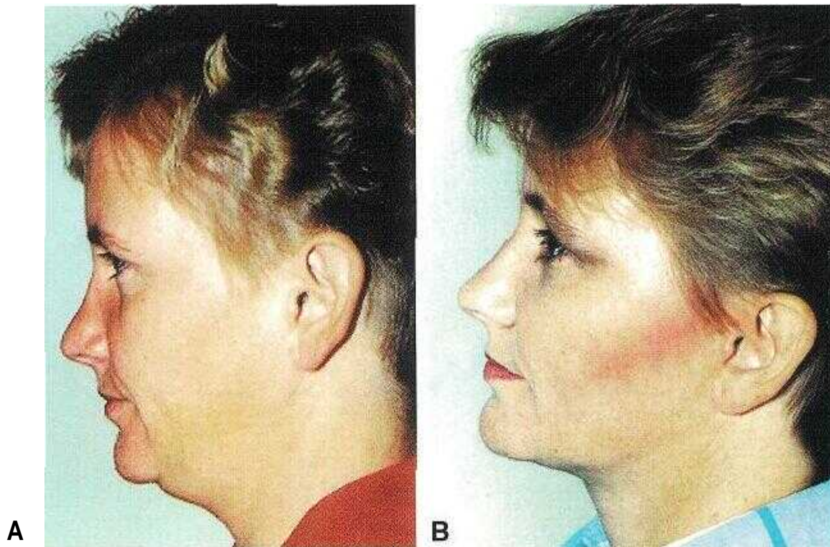

Fig. 1. Patient 1 is 36-year-old female who has had liposuction to her cheeks and neck. (A) Pre- and (B) postoperative views.

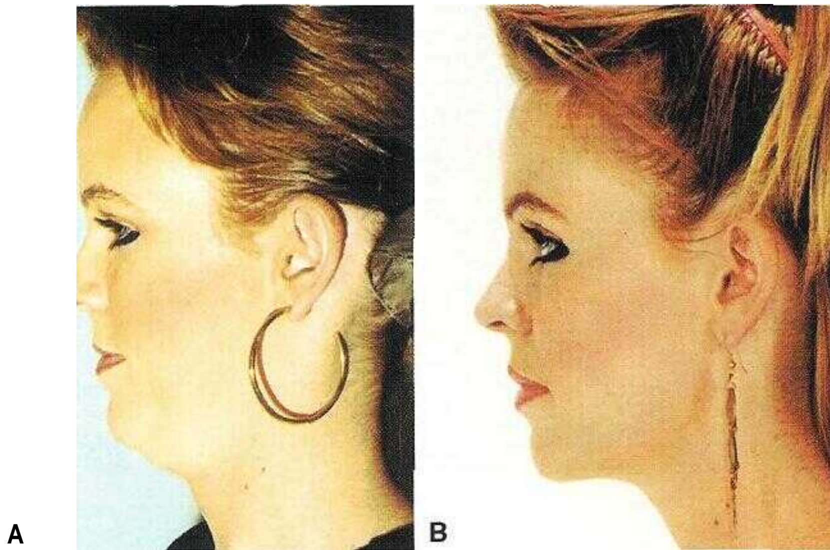

Fig. 2. Patient 2 is a 28-year-old female who has had liposuction only to her neck. (A) Pre- and (B) postoperative views.

Patient 6 is a 36-year-old woman who has had liposuction to her neck and chin (see Figs. 6A-D).

Patient 7 is a 61-year-old plastic surgeon who has had a browlift, facelift, 4-lid blepharoplasty, rhinoplasty, and liposuction to the neck and jowls. He is seen here 9 days after surgery (see Figs. 7A-D).

Results

Our results have been uniformly good with the procedure described (Figs. 1-7). However, three complications have occurred primarily in the early years:

1. *Platysmal bands.* In the beginning, we were not careful enough in assessing the function of the platysmal muscle, and in some cases the excess subcutaneous adipose tissue would actually mask the patient's otherwise prominent platysmal bands. Once these are unmasked by removing the subcutaneous fat, the bands are not attractive and are often a source of more complaint than the patient's original contour [11,12]. We have corrected these by either plicating the platysmal bands in the midline, cutting them through direct excision in a neck fold, or by performing a facelift with platysmal repositioning.
2. *Wrinkling of neck.* Occasionally, when we have taken too much fat from the subcutaneous plane and have not left enough behind to upholster the skin, we have had adherence of the delicate neck skin to the underlying muscle layers. This adherence is unsightly and causes substantial wrinkling. We have attempted autologous fat reinjection with

Fig. 3. Patient 3 has had liposuction to her neck and cheeks, as well as a rhinoplasty. (A,C) Pre- and **(B,D)** postoperative views.

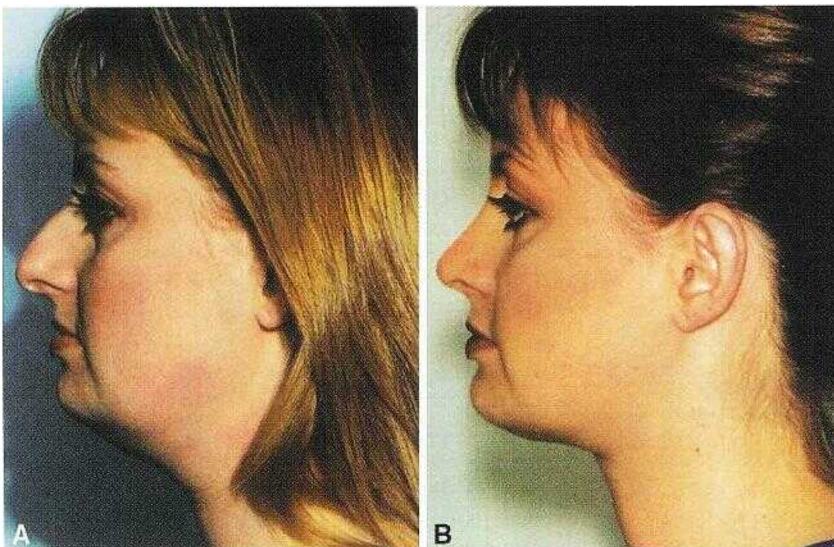

Fig. 4. Patient 4 is a 29-year-old mother of two. She has had rhinoplasty where we decreased the size of her nose, reshaped the tip, and she has had liposuction to her neck and cheeks. She weighs about the same in both pictures. (A) Pre- and (B) postoperative views.

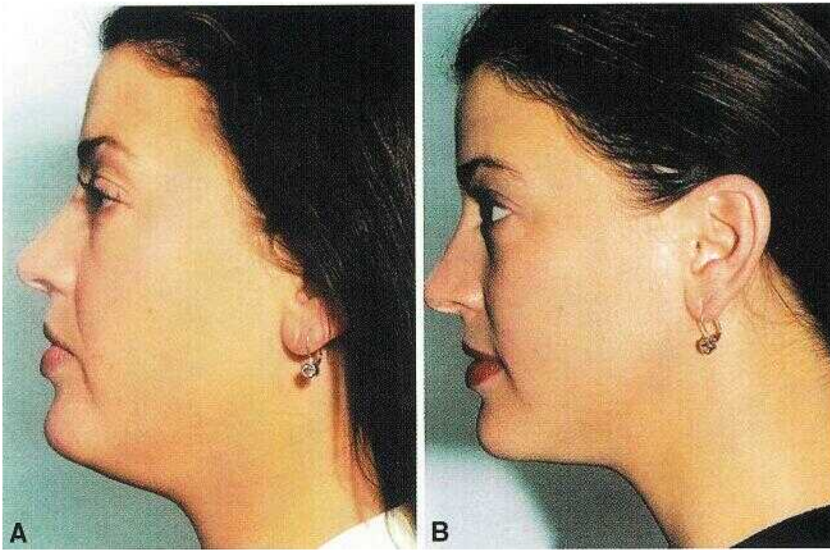

Fig. 5. Patient 5 is a 32-year-old executive who has had liposuction to the cheeks and neck only. (A) Pre- and (B) postoperative

Fig. 6. Patient 6 is 36 years old and has had liposuction to her neck and chin. (A,C) Pre- and **(B,D)** postoperative views.

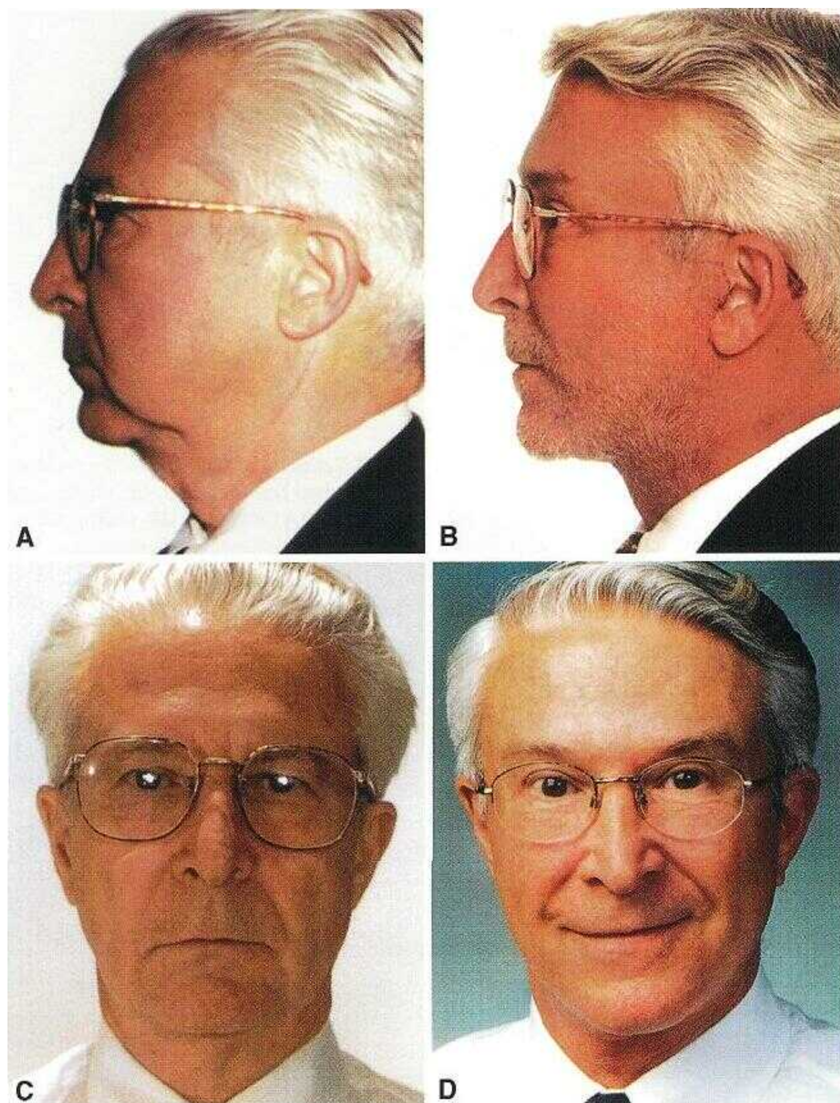

Fig. 7. Patient 7 is a 61-year-old plastic surgeon who has had a brow lift, face lift, 4-lid blepharoplasty, rhinoplasty, and liposuction to the neck and jowls. He is seen here nine days after surgery, (A,C) Pre- and **(B,D)** postoperative views.

occasional improvement, but several patients have never resolved this complication. It must be considered as one of the potential risks of this surgery.

3. *Salivary gland prominence.* In a few cases, we have seen patients with prominent submandibular glands postoperatively that were masked by the thick subcutaneous tissue and were unrecognized preoperatively. In one case, this required a facelift to remove a portion of the salivary gland in order to get a reasonable contour to the neck.

In addition, about 1 case in 20 will manifest a crooked smile postoperative, if you look closely, due to damage to the marginal mandibular branch of the facial nerve.

Because liposuction is performed with "blunt" instruments, the nerve injury is due to axonotmesis or demyelination of the injured nerve, not severance. This has always returned to normal function after about 6 weeks of regeneration, except in one case wherein it required 12 weeks (and the patient reminded us every single day).

Discussion

Platysmal Bands

Preoperative evaluation and planning are necessary for safe and dependable results. We now require a "grimace" pose as one of our routine preoperative photos. This is accomplished by asking the patient to "grimace" by forcibly depressing the corners of the mouth. This will demonstrate the extent of the platysmal muscle and expose any prominent bands, even if they are hidden under a layer of fat. If the platysma is flat, broad, and even, liposuction alone will provide a smooth rejuvenated contour even if the fat is subplatysmal where it can safely be removed by liposuction.

Submaxillary Glands

With the neck extended, an attempt must be made to palpate the submaxillary glands to estimate their size and

prominence. Large or herniated glands must be revealed to the patient and consideration of a facelift is discussed.

Patients frequently ask about the possibility of a facelift or necklift to restore a youthful contour to the neck. If the defect is a simple bulge beneath the chin as in cases 1-5, liposuction alone may be all that is needed. Since it actually requires more skin to cover a sculpted neck with an acute cervico-mental angle that it does to cover a fatty neck with an obtuse angle, excess skin is rarely a problem. This is especially true in younger patients with good skin elasticity. Case 7 is meant to illustrate the opposite end of the spectrum where excess skin is already present, elasticity is poor, and there are other indications for facelift. Obviously, liposuction alone will not produce significant improvement in this situation.

Conclusion

Carefully performed liposuction to the neck and jowls can be a dependable and safe procedure if a few precautions are taken to avoid complications. Seventeen years of experience with several hundred of these procedures demonstrate that this is a substantial addition to our armamentarium.

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