The Staged Face Lift: Addressing the Biomechanical Limitations of the Primary Rhytidectomy

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Background: Although early secondary face lift is a highly scrutinized procedure, it is beneficial for a select group of patients. Justification for performing the early secondary face lift or staged face lift is more apparent when considering the biomechanical limitations of the primary face lift.

Methods: All patients undergoing primary face-lift procedures performed by the senior author (T.A.M.) between 1998 and 2008 were followed for 2 years to determine which patients would benefit from an early secondary rhytidectomy. Early secondary face lifts were performed in the same sub–superficial musculoaponeurotic system plane as the primary procedure and entailed full undermining.

Results: Forty-seven of 742 patients (6.3 percent) undergoing a primary face-lift procedure underwent an early secondary rhytidectomy. Identified limiting factors of the primary face lift included suture-tearing force, viscoelastic properties (tissue creep and stress relaxation), blood supply, and an attempt to avoid an overly pulled appearance. Indications for early secondary rhytidectomy included early symptoms of recurrence or residual age-related changes in patients with severe preoperative laxity or poor soft-tissue elasticity and mainly involved the perioral region. There were no significant complications and there was high patient satisfaction in all cases.

Conclusion: With thorough understanding of the viscoelastic properties of facial tissues and proper consultation with patients, the early secondary face lift can be used as a safe and effective option with which to address the limitations of a primary face lift. (*Plast. Reconstr. Surg.* 130: 1305, 2012.)

CLINICAL QUESTION/LEVEL OF EVIDENCE: Therapeutic, IV.

The stigma of early secondary or staged face lift appears to be one of skepticism. From the surgeon's perspective, the early secondary face lift is often associated with failure of the primary procedure. From the patient's perspective, the early secondary face lift may be viewed as an underdisclosed ploy to perform a second operation after a "partially" performed primary face lift. Regardless of one's beliefs, all surgeons and patients should understand that a primary face lift is neither a permanent nor a completely corrective operation. Even in the hands of a skilled surgeon, all patients undergoing a face lift will experience recurrence of symptoms. This is particularly true of the perioral and/or central neck region, which are prone to exhibit residual changes and recurrence in patients with significant laxity or poor elasticity of facial soft tissues.

Most surgeons would agree that a successful result following a face lift is one in which the

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patient appears 5 to 10 years younger postoperatively and the outcome lasts greater than 2 years. Therefore, the definition of early secondary rhytidectomy used here is a second face-lift procedure that is performed within 2 years of the primary operation to achieve or reestablish the *expected* amount of correction. Within this time period, the three indications for considering an early secondary face lift are to correct partial recurrent relaxation of facial tissues, to improve areas that *could not* be completely corrected by the primary face lift, and to treat complications of the first operation.[1–5] A "partially" performed primary procedure is not a valid indication for an early secondary rhytidectomy, as the first operation should have been as extensive and complete as possible.[5]

Kaye[1] was the first to describe factors that influenced whether a patient may require a secondary face lift. These "risk factors" included heredity, age, extent of deformity at the time of initial operation, weight loss, overexposure to sun, presence of facial scarring from acne, use of tobacco and alcohol, and poor physical or emotional health.[1] Several other hypotheses have been proposed to explain the limitations of the primary face lift, including concerns of suture tearing forces, negative effects on blood supply, and causing an operated appearance from overly aggressive advancement. Edema secondary to surgical trauma has also been thought to cause ballooning of tissues, reducing their elasticity and hindering adequate redraping.[5–7]

Biomechanical properties can also explain why symptoms of aging recur and are likely more relevant than previously reported reasons. Several authors have described the viscoelastic properties of both the skin and the superficial musculoaponeurotic system (SMAS).[8–11] These tissues exhibit stress relaxation (progressive decrease in tension of a tissue elongated to a fixed length) and creep (elongation of tissues placed under a fixed amount of tension). Because of the inherent viscoelastic properties of skin, some stress relaxation is inevitable. Cadaver studies have demonstrated less stress relaxation by the SMAS compared with the skin,[8] but less suture tearing with the skin compared with the SMAS. Therefore, a composite lift has been proposed that combines the benefits of resistance to suture tearing and less stress relaxation. Even with this technique, relaxation does occur. In the senior author's (T.A.M.) experience, stress relaxation results in approximately 20 percent recurrence of laxity over the first months after surgery; however, this number varies depending on the patient's tissues and risk factors.

Understanding the biomechanical reasons for recurrence and limitations of the primary rhytidectomy has allowed the senior surgeon to successfully incorporate the early secondary face lift into his practice. This procedure has proven beneficial in patients in whom it is anticipated that an 80 percent correction of preoperative laxity may be insufficient to satisfy expectations. Gratifyingly, results of the second procedure have been good, with high patient satisfaction. Over one decade, the senior author has performed 47 early secondary rhytidectomies, with good aesthetic outcome and a low complication rate. The senior author's methodology and experience with the early secondary face lift are presented here.

PATIENTS AND METHODS

Patients and Retrospective Evaluation

All patients undergoing primary face-lift surgery performed by the senior author between January of 1998 and January of 2008 were allowed to complete follow-up for 2 years (period ending in January of 2010). Of this population, patients who went on to undergo secondary face-lift surgery were evaluated retrospectively. Medical records were used to identify the indication (e.g., residual symptoms or early recurrence), risk factors (e.g., age and weight loss), and complications (e.g., hematoma, infection, nerve injury, skin slough, flap necrosis, and hairline or earlobe distortion) associated with the surgery. Aesthetic outcome was evaluated subjectively by comparison of preoperative and postoperative photographs. Differences in complications (and risk factors when appropriate) were compared directly between primary and secondary face lift by Fisher's exact analysis (SPSS version 17.0; SPSS, Inc., Chicago, Ill.).

Technique

Preoperative Consultation

Preoperative consultation is the most important aspect of incorporating the staged face lift into one's practice. All patients undergoing a primary face lift in the senior author's practice are informed of the possibility of residual laxity and/or recurrence following a face lift and the option of a secondary face lift during their initial consultation. The likelihood that a patient will undergo a secondary face lift is a combination of the patient's appearance after surgery and their expectations. Therefore, both of these factors are taken into account when predicting the probability of a secondary face lift.

On average, patients undergoing a face lift will experience an estimated 20 percent recurrence of tissue relaxation postoperatively. Although midline structures such as the perioral region and central platysmal bands are the most likely to exhibit residual or recurrent changes, it is more important to evaluate the patient's generalized skin elasticity and laxity rather than focus on an anatomical area. Particular attention should be paid to weight loss, which can cause reappearance of skin laxity because of deflation. If the patient is actively losing weight, the patient is advised to wait until their weight has stabilized, to minimize the need for a secondary procedure. If weight loss is thought to be the harbinger of recurrence, we advise the patient to complete weight loss 3 to 6 months before their secondary face lift.

The secondary face lift is most beneficial for patients who exhibit laxity, sagging, or significant deflation of the perioral region, but is also useful for patients with significant adiposity, laxity, or poor elasticity of the neck. Other supplementary procedures such as submental liposuction, submental platysmal plication, anguloplasty, and fillers are appropriate for some patients. In addition to the secondary face lift, these procedures are also discussed with the patient during their initial consultation along with their indications and probability. Small to moderate amounts of neck adiposity without significant excess skin or poor skin elasticity can be treated with submental liposuction. Recurrent platysmal banding can be addressed through a submental incision with medial platysmal plication and partial platysmal division. Minimal amounts of perioral laxity (i.e., marionette lines) can be treated with fillers; however, care should be taken not to address significant perioral deflation with filler alone, which can result in an unnatural appearance. Arguably, symptoms of recurrence posterior to the jowls can be addressed with smaller, less extensive face-lift procedures[8]; however, since adopting the deep-plane face lift, the senior author has not had problems with this region.

We strongly believe that setting expectations for patients undergoing a face-lift procedure, and disclosing the need for revisions, helps in dealing with the disappointed or dissatisfied patient postoperatively, and moves the discussion into a problem-solving mode rather than a finger-pointing mode. Discussion of secondary procedure costs plays an important role during the initial preoperative consultation. In the senior author's practice, smaller revisions for platysmal bands or additional liposuction are performed at no charge under local anesthesia in the office. Fat grafting and fillers are offered at a discounted rate, but a secondary face lift is performed at half the price of the first procedure.

Although initial discussion of a secondary face lift is entertained before the primary face lift, formal consultation is conducted after all swelling has resolved at approximately 2 to 6 months. The procedure is performed 6 to 24 months after the primary face lift. If the secondary procedure is performed before 6 months, healing from the prior procedure may be incomplete.[5] In the senior author's practice, the formal discussion of a secondary face lift as an option is initiated by the senior author if there is reason to believe the patient's appearance will be significantly improved with a secondary procedure or if it is believed that the patient's expectations have not been meet but can be addressed with the procedure. Preoperative assessment for a secondary face lift is similar to that for the first operation.

Incision

Incisions are identical to the primary face lift. The hairline is unchanged, with a V-shaped incision at the sideburn,[12] and along the hairline in back, and no hair-bearing skin is excised except a triangle in the cutback posteriorly.

Undermining

The senior author uses a modified-deep plane rhytidectomy with a lateral, subplatysmal approach to the neck for all primary and secondary face lifts. The extent of sub-SMAS dissection is as extensive as the primary procedure, taking care to release beyond the previous adherent scar (which in effect is a retaining structure) to allow full mobility of the deep tissues. If the SMAS is released incompletely, suture SMAS plication or excision can result in uneven tension because of anatomical variations in the amount of SMAS mobility. Uneven tension and tissue movement is the hallmark of the lateral sweep or the "operated on, tight" appearance. Although limited dissection has been proposed to address recurrence posterior to the jowls, it usually does not allow for correction of more medial structures. Lifting the SMAS skin largely as a composite flap avoids excessive skin tension and tightness, and minimizes stress relaxation.[1] In cases where another surgeon preformed the first face-lift procedure, the senior author still performs a secondary procedure with a full sub-SMAS dissection. These patients were not included in the study.

Redraping

Vectors used to advance the facial flap are the same as those used in the primary face lift. By

virtue of having been stretched by the primary rhytidectomy, the flap will be less viscous in nature during the secondary procedure, and this may contribute to the long-lasting effects of an early staged secondary face lift.

Liposuction and Fat Grafting

In patients with bulky necks caused by adiposity, hand-held syringe liposuction with a fine cannula is performed as described previously.[12] Patients with mild to moderate adiposity without skin laxity and poor elasticity may fare well with supplemental liposuction alone. However, if there is skin laxity, redraping is more appropriate.

Approximately 10 to 15 cc of the lipoaspirate is injected into the perioral region (nasolabial fold marionette lines) to address age-related deflation. Although some authors will advocate larger amounts of fat grafting to fill the relaxed and deflated perioral tissues, larger amounts of filler can alter the patient's appearance. We believe that an individualized approach should be taken, correcting residual laxity when it has partially reappeared, in addition to volumetric restoration.

RESULTS

Between 1998 and 2008, the senior author performed 742 primary rhytidectomies. Forty-seven (6.3 percent) of these patients (41 women and six men) underwent an early secondary face lift performed within 2 years of the primary operation. In addition, a few patients underwent other supplemental procedures, including submental liposuction ($n = 5$), platysmal plication ($n = 4$), and anguloplasty ($n = 2$). The average age of the patients during the secondary face lift was 63.6 years (compared with 57.1 years in whose who did not require a secondary face lift; $p = 0.13$). Most symptoms of facial laxity were apparent after the initial swelling had resolved (2 to 6 months). Therefore, it was not possible to differentiate between recurrence of facial laxity and residual changes in most patients. Eleven of the early recurrence patients had significant weight loss following their primary operation, which augments recurrent laxity.

The most common indication for a secondary face lift was significant perioral laxity, followed by the neck. Compared with other areas of the face and neck, the perioral region and central platysma were more likely to exhibit residual laxity or recurrence (Fig. 1). Isolated mild to moderate platysmal banding without perioral laxity was most often addressed with platysmal plication. Mild perioral laxity or deflation was often successfully corrected with autologous fat or calcium hydroxylapatite (Radiesse; Merz Aesthetics, Inc., San Mateo, Calif.); however, moderate or significant laxity was better approached with readvancement in addition to fat grafting. In addition to the secondary face lift, three patients required platysmal plication to completely rejuvenate the neck.

There was a high rate of satisfaction by both patients and the senior author following the secondary face lift. Examples of results are presented in Figures 2 through 5. Figures 2 through 4 highlight the benefits of the stage face lift for correcting perioral laxity and the neck. Additional views and patients can be found in the Supplemental Digital Content.

See Figure, Supplement Digital Content 1, which shows the benefit of the staged face lift for correction of residual or recurrent perioral laxity, ***http://links.lww.com/PRS/A604*** [*left*, preoperative view; *second* and *third from left*, photographs taken at 2 and 4 months after a primary face lift (note the nearly complete correction of perioral laxity at 2 months but recurrence of symptoms at 4 months postoperatively); *fourth* and *fifth from left*, photographs taken at 2 and 6 months after a secondary face lift (note the more complete correction of perioral laxity at 2 months and minimal recurrence of symptoms at 6 months postoperatively, which now can be addressed with fillers or fat grafting; more complete correction and decreased recurrence are, in part, attributable to the altered viscoelastic properties of the composite flap].

See Figure, Supplemental Digital Content 2, which shows additional views of the patient shown in Figure 2, a 68-year-old woman with no history of facial surgery who underwent an early secondary face lift, ***http://links.lww.com/PRS/A605***.

See Figure, Supplemental Digital Content 3, which shows additional views of the patient shown in Figure 3, a 58-year-old woman with no history of facial surgery who underwent an early secondary face lift, ***http://links.lww.com/PRS/A606***.

See Figure, Supplemental Digital Content 4, which shows additional views of the patient shown in Figure 4, a 67-year-old woman with no history of facial surgery who underwent an early secondary face lift, ***http://links.lww.com/PRS/A607***.

See Figure, Supplemental Digital Content 5, which shows additional views of the patient shown in Figure 5, a 73-year-old man with no history of facial surgery who underwent an early secondary face lift, ***http://links.lww.com/PRS/A608***.

See Figure, Supplemental Digital Content 6, which shows a 58-year-old woman with no history of facial surgery who underwent an early second-

Fig. 1. Benefit of the staged face lift for correction of residual or recurrent perioral laxity. (*Above, left*) Preoperative photograph of a patient. (*Above, center and right*) Photographs taken at 2 and 4 months after a primary face lift. Note the nearly complete correction of perioral laxity at 2 months but recurrence of symptoms at 4 months postoperatively. (*Below*) Photographs taken at 2 and 6 months after a secondary face lift. Note the more complete correction of perioral laxity at 2 months and minimal recurrence of symptoms at 6 months postoperatively, which now can be addressed with fillers or fat grafting. More complete correction and decreased recurrence are, in part, attributable to the altered viscoelastic properties of the composite flap.

Fig. 2. (*Left*) Preoperative photograph of a 68-year-old woman with no history of facial surgery. (*Center*) Postoperative photograph taken 20 months after the patient underwent a primary face lift, upper and lower lid blepharoplasty, and endoscopic brow lift. Note the residual/recurrence of perioral and neck laxity. (*Right*) Postoperative photograph taken 12 months after the patient underwent a secondary face lift, with significant improvement of the perioral region.

Fig. 3. (*Left*) Preoperative photograph of a 58-year-old woman with no history of facial surgery. (*Center*) Postoperative photograph taken 6 months after the patient underwent a primary face lift. (*Right*) Postoperative photograph taken 12 months after the patient underwent a secondary face lift.

Fig. 4. (*Left*) Preoperative photograph of a 67-year-old woman with no history of facial surgery. (*Center*) Postoperative photograph taken 15 months after the patient underwent a primary face lift, endoscopic brow lift, and upper lid blepharoplasty. (*Right*) Postoperative photograph taken 7 months after the patient underwent a secondary face lift.

ary face lift, ***http://links.lww.com/PRS/A609*** [*left*, preoperative photographs; *center*, postoperative photographs taken 10 months after the patient underwent a primary face lift, perioral dermabrasion, and fat grafting (note the residual/recurrent perioral laxity); *right*, postoperative photographs taken 6 months after the patient underwent a secondary face lift].

See Figure, Supplemental Digital Content 7, which shows a 56-year-old woman with no history of facial surgery who underwent an early secondary face lift, ***http://links.lww.com/PRS/A610*** (*left*, preoperative photographs; *center*, postoperative photographs taken 11 months after the patient underwent a primary face lift, endoscopic brow lift, open rhinoplasty, and dermabrasion; *right*, postoperative photographs taken 6 months after the patient underwent a secondary face lift).

See Figure, Supplemental Digital Content 8, which shows a 73-year-old woman with no history

Fig. 5. (*Left*) Preoperative photographs of a 73-year-old man with no history of facial surgery. (*Center*) Postoperative photographs taken 18 months after the patient underwent a primary face lift and upper and lower lid blepharoplasty. Note the residual skin laxity and adiposity of the neck, which would benefit from both supplemental liposuction and correction of excess skin laxity. (*Right*) Postoperative photographs taken 6 months after the patient underwent a secondary face lift.

of facial surgery who underwent an early secondary face lift, ***http://links.lww.com/PRS/A611*** [*left*, preoperative photographs; *center*, postoperative photographs taken 6 months after the patient underwent a primary face lift, upper and lower lid blepharoplasty, endoscopic brow lift, and perioral dermabrasion (note the recurrent perioral laxity that resulted, in part, because of the poor skin elasticity); *right*, postoperative photographs taken 9 months after the patient underwent a secondary face lift and revision upper lid blepharoplasty).

The procedure was performed with ease in all patients. One patient suffered a postoperative infection; otherwise, there were no complications (e.g., hematoma, nerve injury, skin slough, flap necrosis, or hairline or earlobe distortion). There were no significant differences in rates of infection (secondary, 2.1 percent; primary, 1.1 percent), hematoma (secondary, 0 percent; primary, 0.6 percent), neurapraxia (secondary, 0 percent; primary, 0.6 percent), skin slough (secondary, 0 percent; primary, 0.3 percent), or flap necrosis (secondary, 0 percent; primary, 0 percent) between primary and secondary face lifts.

On review of the senior surgeon's experience, limitations of the primary face lift were identified.

Intraoperatively, the ability of the primary face lift to achieve complete correction is limited by concerns of tension on blood supply and limitations of the tissues to hold sutures without tearing through. Furthermore, transmission of laterally based tension is dampened from reaching medial structures by the viscoelastic properties of the facial flap and hinders complete correction of the perioral area. This was especially true in patients older than 60 years and those with severe preoperative age-related changes. In these populations, the tissues appear to be more viscous and lack elasticity. Postoperatively, stress relaxation and creep causes recurrence of previously corrected age-related changes. These changes tend to occur early (within 6 months) and continue until a new steady state is reached between holding tension and tissue relaxation.

DISCUSSION

Patients who benefit from early secondary face lift are those with marked laxity and poor skin elasticity preoperatively and those who exhibit significant stress relaxation of their tissues postoperatively, specifically, in the perioral region. With increased experience over the past 15 years, the senior author has become comfortable offering a staged face lift to patients in addition to discussing the limitations of a primary rhytidectomy. When deciding whether a patient is a candidate for an early secondary face lift, it is important to distinguish patients who would benefit from a staged face lift from the group of patients who are disappointed with the results of the primary procedure and patients in which more improvement was expected from the primary procedure. These issues (often recurrent residual platysmal bands, residual fat in the neck) can generally be corrected with a minor in-office revision.

In the series of patients presented here, the staged secondary procedure was performed as a complete sub-SMAS dissection in the manner described previously.[12] The procedure was associated with good aesthetic outcomes and a high degree of patient satisfaction. There were no significant complications and the procedure was well tolerated by patients. Recovery was generally shortened by one-third compared with the primary operation, with less swelling and bruising, presumably because no new tissue planes are developed. These results suggest that the concept of staged rhytidectomy is a good surgical option for a select group of patients.

The viscoelastic properties of the SMAS and skin may account for many limitations of the primary face lift. In a recent study, Trussler et al. demonstrated that the ex vivo SMAS elongates 14 percent (creep) within 5 minutes under normal amounts of suture tension.[13] In the senior author's personal experience, relaxation of facial tissues continues at least until the patient no longer experiences the sensation of tightness, which is generally for several weeks. Because of neck turning and greater stress relaxation in the neck, there is generally more relaxation in the neck. Movement in the perioral region may also contribute to increased amounts of recurrence in this area.

There are other inherent limitations to the correction achievable in primary face lift. The blood supply to the undermined skin is compromised, and tension further compromises blood flow,[8–10] which can result in skin necrosis. There are no easy guidelines for the amount of tension tissue can tolerate; thus, surgeon experience plays a substantial role. Another important factor is the amount of force that can be placed before the suture will tear the tissues, which is a particular issue with the SMAS.[8] In this regard, placing too much tension on sutures may cause the SMAS to tear and will lead to overall failure of the operation. Finally, the viscous nature of the facial flap dampens transmission of laterally based tension from reaching medially situated tissues, limiting the amount of correction. This partially accounts for the difficulty of correcting the perioral areas and/or the extreme laxity in the medial neck from the purely lateral approach. Although extensive dissection can potentially overcome this limitation, this results in greater postoperative swelling, which may result in increased early stretch.[8] Lastly, aggressive advancement of facial flaps may lead to lines of tension, which results in an operated appearance. It is the senior author's conviction that leaving the SMAS skin layers as composite tissue in most of the face and the entire neck limits early postoperative stress relaxation and creep, and maximizes blood supply.[8]

There are several advantages to an early secondary procedure or staged face lift. During the secondary operation, one is essentially elevating a delayed flap. By virtue of the improved blood supply, greater tension may be applied to the flap during advancement without increasing the risk for skin necrosis.[3] Also, the reoperated facial flaps may be stiffer and less viscoelastic than primary flaps.[9] Conceptually, this finding is analogous to the loss of elasticity one observes in a rubber band that has been stretched for a significant amount of time. This change in biomechanical properties serves two benefits. When lateral tension is

placed on a facial flap, more force is transmitted to medially situated structures. This may allow for greater or further correction of perioral regions and platysmal bands compared with the primary operation. Second, stretch relaxation and creep are expected to decrease with increased stiffness and decreased viscosity of the tissues. These properties may account for the longer lasting results commonly observed following a secondary rhytidectomy when compared with the primary face lift.[2,4,6]

The results of this study demonstrate that the early secondary face lift is an efficacious and safe procedure. Some surgeons argue that secondary dissection in the sub-SMAS/subplatysmal plane may be dangerous secondary to scarring, which places critical nerves and vessels at risk for injury.[1] From our experience, the secondary rhytidectomy is easier to perform than the primary operation in terms of bleeding, but it is especially important to be in the correct tissue plane. It can be easier to penetrate the masseteric fascia or the thin fascia overlying the buccal fat pad, which puts the facial nerve at greater risk. If there has been no previous hematoma or infection, scarring is usually minimal. Critical structures can be identified and avoided with the use of sharp dissection aided by hydrodissection from relatively large amounts of dilute local anesthetic (250 to 300 cc total). In this series, there were no nerve injuries or postoperative hematomas.

From the patient's perspective, the secondary rhytidectomy also carries advantages and disadvantages over the primary face lift. Patients are more inclined to be satisfied and, although the dissection is as complete as the first operation, the recovery is substantially faster because fewer blood vessels and lymphatics are interrupted, with the dissection occurring through a previously dissected area. Results of the secondary face lift tend to last longer than those of the first operation.[1] Thus, subsequent renewal procedures can be performed at increasingly longer intervals.[6] Patients who have had a previous face lift tend to be more experienced and thus the postoperative recovery is less stressful. Patients with unrealistic expectations who request a secondary procedure in the face of minimal or no deformity will likely be unpleased with a second face lift. Therefore, patient selection is paramount. However, with increasing experience, the senior author has increased his enthusiasm for the staged early secondary face lift to more fully correct patients with high expectations or marked laxity preoperatively.

Some authors will argue that the secondary face-lift procedure does not need to be as extensive as the first.[4] Although less extensive procedures may be beneficial for persistent jowling and malar sagging, correction of the perioral region requires a more extensive dissection. In addition, if the SMAS is completely released, advancement may result in uneven distribution of tension, increasing the risk of an operated appearance. Although some surgeons argue that incomplete rejuvenation is justification for performing an ancillary procedure, this may not always be necessary. As discussed here, the primary rhytidectomy is often limited in its ability to completely rejuvenate the midface and neck, which is not equivalent to saying the rhytidectomy is not effective. In fact, the face lift, when performed a second time, is highly effective, and ancillary procedures such as platysmal plication are not usually necessary. In this series, only three patients (6.4 percent) required platysmal plication in addition to their secondary face lift to completely rejuvenate their neck.

The key to successfully incorporating the early secondary rhytidectomy into one's practice is appropriate consultation. Unless this is made emphatically clear at the outset, there will be patients who think that the results of a single face-lift operation will completely rejuvenate their face and neck and last indefinitely.[1] Limitations of the primary face lift should be differentiated from complications and failures. In the senior author's practice, this discussion is aided by review of patient photographs. Although it is difficult to fully predict who will require a secondary procedure, one should generally expect a 20 percent recurrence of symptoms. In patients with severe laxity and poor elasticity—specifically, in the perioral or central neck region—an 80 percent correction may not be sufficient to meet the expectations of the patient, and a secondary procedure may be anticipated. Ancillary procedures (e.g., platysmal plication, submental liposuction) should also be discussed with the patient during the initial consultation along with their indications and probability, because these are different from the secondary face lift. An appropriate consultation will also include discussion of cost. Although only 6.3 percent require a secondary procedure and 3.8 percent will require some ancillary procedure, the early discussion of the options for revision removes a source of patient discontent.[4]

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PATIENT CONSENT

Patients provided written consent for the use of their images.

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