

Prediction of Face-Lift Outcomes Using the Preoperative Supine Test

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Abstract

Background Patients considering a facelift (facial rhytidectomy) need some means of predicting their surgical outcomes. This will help them decide whether to proceed with the operation.

Methods A total of 50 consecutive patients were asked to examine themselves with a hand-held mirror while lying supine on an examining table to give them a reasonable approximation of their postoperative result.

Results The tissues of the face redrape in a very aesthetic manner when lying completely supine. The appearance that the patient sees of himself or herself during the “supine test” correlated very well with the actual postop result after rhytidectomy consisting of subcutaneous undermining, SMAS plication, and platysmaplasty.

Conclusion This supine test may be useful in helping patients preoperatively predict their facelift outcomes and may serve as a good adjunct to imaging.

Keywords Face-lift · Meloplasty · Prediction · Rhytidectomy

Patients presenting for face-lift consultation often have many questions regarding the degree of correction produced by face-lift. The questions span the extent of tissue lift,

correction of facial aging lines (marionette fold, nasolabial fold), and overall effect on facial appearance. Although patients often demonstrate what they wish to have lifted by pushing on their facial tissue with their fingers, they are unsure whether the operation will produce a sufficient, satisfactory result. Moreover, the appearance of their face when they push the skin of their face back is not necessarily what the result will be. Usually patients pull their skin tighter than it is during surgery. Finally, a number of patients are not quite candidates for a facial rhytidectomy because the problem is not that great.

If patients could get an idea as to how much improvement a face-lift will or will not give them, it would help them decide whether they are ready for the operation or should wait until their facial elastosis is severe enough to warrant surgery. To predict the outcome of surgery, imaging [1–3, 6, 7] has been helpful, but it is very dependent on how aggressive the surgeon is when morphing and brushing the images.

We describe our experience over the past few years using a simple clinical test to give patients a prediction of their appearance after a face-lift operation. The test has already been in use by a number of surgeons, but to our knowledge, it has not been described in the literature. The method involves simply positioning the patient on the examination chair, positioning the back of the chair into a full supine position, and providing the patient with a handheld mirror to see the change in facial appearance.

Methods

Supine Test

Over the past several years, the senior author (C.H.) has used the “supine test” for almost all patients coming in for

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Fig. 1 The “supine test” is performed by asking the patient to lie in the supine position and hold a mirror directly above his or her head. The patient is asked to pay particular attention to the improvement in the jowl and neck area and told that the results of a face-lift will be very similar to that seen in the mirror. If the patient has some submental fullness due to lip hypertrophy, the surgeon presses upward with one finger to mimic what fat removal in this area will achieve

face-lift consultation. After the patient is seated on an adjustable examination chair, the back of the chair is fully reclined to place the patient in an absolutely supine

Fig. 2 Preoperative view of a middle-aged patient with facial elastosis as seen in side (a) and frontal (b) views



position. A handheld mirror then is given to the patient (Fig. 1), so he or she can appreciate the appearance of the facial tissues without the inferior pull of gravity. The mirror is held directly above the eyes and parallel to the ceiling. If the patient has some submental fullness due to fat, the surgeon’s finger is placed in the submental region, and gentle pressure is applied upward to push the fat out of the way and mimic submental fat removal. The patient is cautioned that the result he or she sees demonstrates improvement only to the sides of the face, jowl area, and neck, not in the periocular or perioral regions.

Surgical Approach

Facial rhytidectomy (meloplasty) involves wide skin undermining and submucosal aponeurotic system (SMAS) plication similar to that described elsewhere [9]. Submental fat is removed by either liposuction or direct excision. The platysma is almost always plicated medially, and an inferior myotomy is performed in almost all cases.

Results

The supine test provided good prediction of face-lift results, as evidenced by the example in Fig. 2a and b. The patient in this example was considered to be a good candidate for facial rhytidectomy. In the supine position, the tissues redrape due to gravity and exhibit a much improved overall facial appearance (Fig. 3). Postoperatively (at 10 months), the patient exhibits a significant improvement



Fig. 3 Patient in the supine position causing the skin to redrape and give an approximate appearance of what the face-lift result will produce

(Fig. 4a, b). The postoperative lateral view does indeed look similar to the preoperative supine view. The supine test was performed for 50 consecutive patients, none of whom complained that the postoperative result did not match that seen during the supine test.

Discussion

Providing patients preoperatively with predictions regarding their postoperative result is a challenge faced by surgeons every day [1, 4, 6, 7], particularly in aesthetics. The

operations span the gamut of procedures we perform and include patients who wonder how their breasts will look after augmentation, those who wonder how their arm contour and scars will look after brachioplasty, and those who wonder how their faces will look after face-lift, mid face-lift, and blepharoplasty. The supine test is a helpful method in this regard.

The first impression of the supine test is that it redirects the inferior pull of gravity to a lateral direction and therefore does not faithfully reproduce the superior or superolateral vector of pull used by other types of face-lift operations. Empirically, however, the tissues of the face do migrate superiorly when the patient is in a supine position and do mimic the results of the SMAS plication/plasty operation. Because the results of SMAS plication are very similar to those for other types of SMAS procedures, it is suspected that the supine test will work for them also.

However, the supine test may not be applicable for all facial rejuvenation procedures [8]. Certainly, those that involve substantial malar elevation may not be benefited by it. Tonnard and Verpaele [10] address this problem directly in their book on the minimal access cranial suspension (MACS) face-lift. They provide a true preoperative “vertical” lift simulation by having patients stand on their head and photographing their face while they are upside-down. Their technique most accurately replicates the vertical vector of pull produced by their operation and is a testament to the authors’ devotion to accuracy.

Fig. 4 Postoperative lateral (a) and frontal (b) views (at 10 months) of the middle-aged patient who performed the preoperative supine test. Note that the postoperative lateral view is very similar to the preoperative supine view, confirming that the supine test is a good predictor of postoperative results using the technique described by the authors



In summary, the preoperative supine test is a very simple and rapid test that can be used easily to provide a prediction of face-lift results. It is an adjunct to imaging that forewarns the eager young patient who will not get much benefit from a facial rhytidectomy. Our patients have appreciated it, and it has proved to be reasonably accurate and helpful for the SMAS plication/platysmaplasty operation.

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