The Asian Face Lift

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ABSTRACT

The face-lift procedure (rhytidectomy) is increasingly popular in Asia. There is extensive literature on different techniques in Western patients. Cultural and anthropomorphic differences between Asian and Caucasians require the adaptation of current techniques to obtain a satisfactory outcome for both the patient and the surgeon. This article therefore attempts to define important differences between Asians and Caucasians in terms of signs of facial aging, perception of beauty, and surgical goals. Our face-lift technique, a modified deep-plane face lift for Asians, is detailed and cases are presented.

KEYWORDS: Asian, Oriental, aesthetic surgery, face lift, rhytidectomy, modified deep-plane face lift

Facial rejuvenation surgery is increasingly popular in Asia. Whereas there is extensive literature about Oriental blepharoplasty procedures,¹⁻³ discussions pertaining to the particularities of Asian face lifts have been scarce.⁴⁻⁸ Specific cultural and anthropomorphic differences require a different approach to restore facial youthfulness and attractiveness. This article attempts to define important differences between Asians and Caucasians in terms of signs of facial aging, perception of beauty, and surgical goals. Our face-lift technique, a modified deep-plane face lift for Asians, is detailed and cases are presented.

BACKGROUND

Current face-lift techniques must be adapted to the Asian population. Signs of facial aging in Asians are often different than in Caucasians (Table 1). Skin thickness and quality remains fairly good with aging. Rhytides and skin laxity are less present than in Caucasians, lessening the need to redrape and excise excessive skin. Rejuvenation procedures must therefore focus more on

subcutaneous tissue repositioning, which often involves variants of superficial musculoaponeurotic system (SMAS) and deep-plane face lifts. Furthermore, concepts of beauty and youthfulness are different. The outcome of surgery must therefore be adapted. This section discusses the Asian perception of beauty, perception of facial aging, and technical points to take into account when performing a face lift on an Asian patient.

Asian Perception of Beauty

Because of the subjective nature of beauty, it is particularly difficult to provide a single description of a beautiful Asian face. Different regions of Asia have different tastes regarding the matter.⁹ There are, however, some facial characteristics that are generally regarded as favorable: large bright eyes, some degree of nasal dorsum and tip projection, an oval facial shape, and a smooth mandibular outline. A square jaw with prominent mandibular angles and high cheek bones are generally considered as unfavorable traits¹⁰ as they are perceived as harsh and severe.

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Table 1 Facial Aging Signs in Asians

Skin stays relatively elastic and thick
Few rhytides
Dyschromia
Nasolabial folds
Jowls
Loss of jaw line

Frequent Complaints and Treatment Expectations

Although complaints of patients about signs of aging are the same (nasolabial folds, marionette line, jowling, loss of mandibular definition, platysmal banding, etc.), their expectations from surgery are often quite different. In contrast with Caucasians, more emphasis is placed on correction of the nasolabial fold, and less on aggressive neck correction. The mandibular line and jowls are also important to treat, but the end point is different. There should be a smooth oval facial outline with moderate correction of neck laxity instead of a sharp, more angular mandibular contour with a perfectly tightened neck. Neck dissection is therefore often much less extensive. Dissection 2 to 4 cm below the mandible and submental liposuction are often the only procedure required. This limited neck dissection often spares the need for the retroauricular incision of classic rhytidectomies. Platysmal banding, when present, is expected to be treated the same way as in Caucasians.

Difference in Techniques

Subcutaneous, “mini” face lifts (S-lift,¹¹ minimal access cranial suspension [MACS],¹² and others⁶), SMAS, deep-plane^{13,14} and subperiosteal face lifts^{5,8,15} can all be performed safely in Asians. There are, however, a few technical points that must be taken into account (Table 2). Planes of dissection are similar, but the extent of dissection differs. A wide neck undermining is less frequent than that in Caucasians. The nasolabial

Table 2 Important Points Concerning the Asian Face Lift

Zygoma projection and mandibular angularity are perceived as severe traits
Full cheeks, smooth mandibular outline, and an oval facial shape are desirable
Skin resection is often minimal compared with that in Caucasians
The modified deep-plane face lift is well suited to reposition the descended subcutaneous tissues
Neck dissection and redraping is often less aggressive than that in Caucasians
Scars should be well concealed as hypertrophic scarring is more frequent

folds are very important to address during surgery. The modified deep-plane technique presented later is particularly well suited to address this concern. Because skin laxity is often minimal compared with that in Caucasians, more emphasis must be made on repositioning the SMAS adequately to achieve facial rejuvenation. By corollary, a skin-only face lift will likely not address the problem and produce unfavorable results. Restoring a smooth mandibular outline is important, but angularity and excessive definition is not considered attractive.

THE ASIAN FACE LIFT (MODIFIED DEEP-PLANE FACE LIFT)

This section introduces the modified deep-plane face lift for Asians. It addresses the nasolabial fold, restores cheek fullness, and smooths the mandibular line. Preserving the masseteric ligaments prevents Bichat's fat herniation, which would give an unfavorable definition of the zygomas in Asians. Figure 1 introduces the facial ligaments that need to be addressed during the modified deep-plane technique presented.

Indications

As with other face-lift procedures, the typical patient is in his or her fifties and presents nasolabial fold deepening, jowling, loss of mandibular line, submental lipodystrophy, and neck laxity. A more aggressive neck dissection and redraping is usually performed when platysmal band are present. Brow ptosis and frontal rhytides are indications to perform a concomitant bicoronal forehead lift with corrugator resection.

Incisions

Figure 2 illustrates the incisions used. A slightly curved temporal incision is used and is extended superiorly to allow later repositioning of the lateral eyebrow. If a concomitant forehead lift is performed, the bilateral temporal incisions are joined superiorly to perform a formal bicoronal incision. Anterior to the ear, a retrotragal incision is preferred. Inferiorly, the incision often ends a few millimeters behind the lobule tip. If an extensive neck redraping is planned, the incision can be extended close to the concho-mastoid groove, on the mastoid skin and into the hair-bearing scalp.

Extent of Subcutaneous Dissection

Figure 2 illustrates the typical extent of the subcutaneous dissection. Superiorly, the dissection extends 1 cm above the zygomatic arch. Inferiorly, the dissection extends a few centimeters below the mandibular angle. Anteriorly, the dissection stops roughly at a “vertical line” dropped

Figure 1 Ligaments, septum, and adhesions relevant to the modified deep-plane face lift. Temporal and periorbital area: superior temporal septum, inferior temporal septum, temporal ligamentous adhesion (TLA), supraorbital ligamentous adhesion (SLA), periorbital septum (PS), lateral brow thickening of periorbital septum (LBT), lateral orbital thickening of periorbital septum (LOT). Midface area: zygomatic ligament, masseteric ligament, mandibular ligament. All of these ligaments are divided during dissection, except the masseteric ligament to prevent Bichat's fat herniation.

from the lateral orbital rim, where the orbicularis muscle fibers are seen.

Extent of Subgaleal Dissection

In the temporal area, a subgaleal dissection is carried superior to the zygomatic arch. The undermining is performed anteriorly to the lateral eyebrow. To mobilize the lateral eyebrow (Fig. 1), one needs to release the superior temporal septum, inferior temporal septum, temporal ligamentous adhesion, lateral brow thickening, and lateral orbital thickening of the periorbital septum.¹⁶

If forehead rhytides and brow ptosis are present, a formal bicoronal forehead lift is performed. The supra-orbital ligamentous adhesion is released as well. Partial

corrugator resection is performed. A monopolar cautery with a Colorado-type needle is used to score the undersurface of the frontalis. One needs to identify by transparency from the undersurface of the frontalis the two supraorbital nerves. Scoring of the frontalis is made with transverse cautery lines in between the two nerves, stopping ~1 cm from each nerve to avoid forehead anesthesia.

Extent of Sub-SMAS Dissection and "Deep-Plane" Dissection

Figure 3 illustrates the extent of the sub-SMAS dissection. To facilitate the exposure for the following dissection, it is suggested to ligate and divide the superficial

Figure 2 Skin incision and extent of subcutaneous dissection. The temporal incision is hidden behind the hairline. A retro-tragal incision is performed. The retro-auricular incision is extended superiorly as necessary. The subcutaneous dissection (light gray area) extends from ~1 cm superior to the zygomatic arch to 2 to 4 cm below the mandibular border. Anteriorly, it reaches a “perpendicular” or “vertical” line along the lateral orbital rim.

artery and vein. Releasing 1.5 to 2 cm of the superficial temporal fascia, which now separates the upper subgaleal dissection from the lower subcutaneous dissection, will allow the skin flap to be reclin ed anteriorly.

The SMAS is incised below the zygomatic arch, 1.5 to 2 cm anterior to the ear. The dissection proceeds anteriorly, between the SMAS and the parotid fascia. It stops at the masseteric ligaments, which are preserved. Releasing these cutaneous ligaments and dissecting further will likely cause Bichat’s fat to herniate, complicate the procedure, and give too much definition to the zygomas.

Inferiorly, the dissection extends anteriorly along the mandibular border, deep to the platysma. Once the

mandibular cutaneous ligaments are visualized, they are released. Liposuction of the submental area can be performed at this time if required.

Superiorly, the sub-SMAS dissection is continued until the lateral border of the zygomaticus major is seen, at its confluence with the orbicularis muscle fibers. At this point, the dissection plane changes to a more superficial plane, following the surface of the zygomaticus major. This plane change is necessary to prevent injury to the facial nerve branch to the zygomaticus major muscle, which enters the muscle belly from its undersurface. The dissection proceeds until the zygomaticus minor is seen. The tip of the scissors are used to bluntly free the nasolabial fold. At this point, it is critical to adequately

Figure 3 Modified deep-plane dissection. The SMAS is incised along the dotted line. The shaded area is the zone that is undermined. The superior dissection starts under the SMAS in the cheek area. It proceeds superiorly and anteriorly until the lateral border of the zygomaticus major is seen (where the superior arrow is broken). The dissection plane is then made just superficial to the zygomaticus major. The dissection continues anteriorly and inferiorly over both the zygomaticus major and minor. The nasolabial fold is released by blunt dissection with scissor tips. In the inferior dissection (lower arrow), the dissection is carried along the mandibular border anteriorly until the mandibular ligament is released.

free the zygomatic ligament (see Fig. 1) from the SMAS. An adequately released SMAS will move freely upon traction and provide a smooth cheek contour, without skin dimpling or irregular waving at the nasolabial fold.

Repositioning the Tissues

Pulling on the mobilized SMAS in a superolateral direction will allow smoothing of the nasolabial fold as well as reposition cheek soft-tissues. Fibrin glue is applied. The SMAS is then anchored to the zygomatic

arch with 3-0 PDS sutures (Ethicon, Somerville, NJ). Traction on the lower part of the SMAS is used to smoothen the mandibular border. The SMAS/platysma flap is sutured to the mastoid area. Excessive skin in the cheek area is resected. Note that skin resection is often very minimal compared with that in Caucasians. Fibrin glue is applied in the subcutaneous plane, and final skin closure is performed.

Particular attention is paid to the tragal and lobule area. The tragal skin flap is thinned. A deep suture is then used to re-create the pre-tragal sulcus. The retro-tragal incision is then closed normally. When closing the

Figure 4 Asian female face lift. Combined face lift and forehead lift. (A, B) Preoperative; (C, D) postoperative. Note the improvement of the nasolabial folds. The mandibular line is smoothed without excessive definition. An attractive, youthful, oval facial shape is restored.

skin incisions around the earlobe, no tension should be placed on it to prevent the pixie ear deformity.

In the temporal area, the scalp is pulled to reposition the lateral brow in the desired position. Excessive scalp is trimmed, and skin closure is performed with subcutaneous sutures and staples.

Results

Figures 4 and 5 illustrate a female and a male Asian face lift, respectively. In both cases, note the improvement of nasolabial folds, restoration of cheek fullness, and the smoothing of the mandibular line, which restores the desired oval facial shape.

Postoperative Course

Antibiotics are given at induction time, as well as for 3 days postoperatively. Sutures are removed at 5 days, and scalp staples are removed at 2 weeks. Cold packs are applied for 15 minutes every hour while awake during the first 48 hours. Warm packs are then applied three

times daily for 2 weeks. Patients are instructed to refrain from performing activities that can increase blood pressure or increase blood flow to the face for 2 weeks. Social activities can be resumed at soonest at 1 week. The final result is obtained at 3 to 6 months postoperatively when most of the healing process has occurred.

Complications

As with other face-lift techniques, possible complications can include wound dehiscence, skin necrosis, facial nerve palsy, and asymmetries. Tragal deformation, lobule lengthening, and hypertrophic scars are also possible unfavorable outcomes. The rate of complications, however, is similar to that of other techniques, with the exception of hypertrophic scarring, which is believed to occur more often in the Asian population.

The fibrin glue is used to reduce both the postoperative hematoma rate and the extent of swelling.¹⁷ The avoidance of drains is both comfortable for the patient and convenient for the surgeon.

Figure 5 Asian male face lift. Face lift and lower eyelid blepharoplasty. (A, B) Preoperative; (C, D) postoperative. Nasolabial folds are improved, cheek fullness is restored, and a smooth, youthful mandibular outline is obtained.

CONCLUSION

The Asian face lift requires an adaptation of current techniques to achieve the desired aesthetic outcome. Cultural differences and differences in anthropomorphic features alter the patient's vision of beauty and youthfulness. The modified deep-plane face-lift technique presented in this article is particularly well suited for Asian patients. The less aggressive neck dissection provides a smooth mandibular line without excessive definition. Sparing of the masseteric ligaments prevents Bichat's fat herniation, prevents undesirable zygoma overdefinition, and restores cheek fullness to provide a smooth face. However, one should not assume that all Asians have a similar

concept of beauty. Patients from different regions of Asia have subtle aesthetic taste differences, and immigrants to other continents might be greatly influenced by local aesthetic traits. A careful discussion with the patient to define his or her concerns as well as detailing the goals of surgery is therefore mandatory for a successful treatment.

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