Cervical Contouring in Face Lift

Editor’s note: My thanks to the moderator, James M. Stuzin, MD (board-certified plastic surgeon and ASAPS member, Miami, FL), and to panelists Daniel C. Baker, MD (board-certified plastic surgeon and ASAPS member, New York, NY); Joel J. Feldman, MD (board-certified plastic surgeon and ASAPS member, Cambridge, MA); and Timothy J. Marten, MD (board-certified plastic surgeon and ASAPS member, San Francisco, CA), for sharing their opinions and clinical experience.

Dr. Stuzin: The first patient is a 45-year-old woman who is concerned about the solitary platysmal band in the right side of her neck (Figure 1). Dr. Baker, how would you approach treating this patient?

Dr. Baker: I see very few options. She has overtreated skin, minimal facial aging, and very little neck fat. I would avoid operating on her.

Dr. Stuzin: Dr. Feldman, how would you evaluate this patient?

Dr. Feldman: Her neck looks good except for that short platysmal band that bothers her, but she also appears to have an enlarged right submandibular salivary gland. I would free the medial edges of the platysma from the superficial fascia, undermine the muscle to the anterior gland capsule, open the capsule, and, using the electrocautery, take out just enough of the superficial lobe to flatten the bulge. It appears that there is no need to remove subplatysmal fat. I would repair the platysma with a full corset platysmaplasty to cover the entire anterior neck with a smooth sheet of muscle and, of course, eliminate the muscle band. I would undermine the neck skin flap widely enough to redistribute the skin so that none of it would need to be removed.

Dr. Stuzin: Do you believe you could do that effectively and safely through a submental incision?

Dr. Feldman: Yes, I would use only the submental incision.

Dr. Stuzin: Dr. Marten, how would you approach treatment?

Dr. Marten: This patient has a severe, unnatural look and overtreated skin. Her eyebrows are shaved and penciled in higher, hiding her forehead ptosis. She has lower lid retraction, midface laxity, and scant submental fat, which suggests she has had prior submental lipoplasty. I assume that the band is accentuated on platysma activation and is of muscular origin. If her concern were only the band, I would recommend Botox as primary treatment because of the lack of submental subcutaneous fat. In my opinion, however, she would benefit from full facial rejuvenation, including forehead lift, canthopexy, and face and neck lift. This would result in a softer and more harmonious appearance.

Dr. Stuzin: Would you use a “high SMAS” technique?

Dr. Marten: I would. Frequently patients like this are focused on their neck and do not see aging elsewhere. If she consented to a face lift, the “high SMAS” technique would redistribute ptotic cheek tissue into the upper...
malar and infraorbital regions. In most other techniques redundancy is excised and discarded. Treatment of her neck would include reduction of her prominent submandibular gland, platysmaplasty, and anterior platysma myotomy. The latter is the maneuver that would eliminate the platysma band.

**Dr. Stuzin:** At what level would you cut the muscle?

**Dr. Marten:** I would perform platysmaplasty at the level of the cricoid cartilage. If the platysma is transected higher where it is thicker the cut edges tend to show and are more likely to bleed. When transected at the level of the cricoid, the band is disrupted, but there is usually little bleeding and no step-off deformity.

**Dr. Stuzin:** What would be the length of your myotomy?

**Dr. Marten:** I would carry it a few centimeters lateral to the band on each side. I would not cut it full width because the patient already has a harsh-looking jaw line.

**Dr. Stuzin:** Dr. Feldman believes that the myotomy is the best treatment for the band. You emphasize suturing the muscle as your corset platysmaplasty. I understand you do not cut the muscle. Would you talk about the necessity for myotomy?

**Dr. Feldman:** I essentially never cut the muscle. You really do not need to cut if you tighten the muscle with the corset and bring the edges together so that the bands are permanently eliminated. I rarely have a recurrence in a band.

**Dr. Stuzin:** Dr. Baker, what is your experience performing a myotomy? Is it really necessary to get rid of the band? Do you agree with Dr. Feldman?

**Dr. Baker:** I have had very little experience with Dr. Feldman’s technique. I divide between the thyroid and cricoid cartilages and believe that you have to interrupt the band or eliminate it. However, with all the techniques that we perform, there are still recurrences. In the anterior neck triangle in which the patient has very slight submandibular gland prominence, if you take out the gland it will deepen the triangle. I am concerned that the line extending between the sternomastoid, trachea, and the thyroid cartilage may have a depression. This is a patient on whom I would not do a brow lift; it would give her an artificial look. She would probably benefit from just a skin lift as much as she would from a SMAS or any other technique.

**Dr. Stuzin:** Both Dr. Feldman and Dr. Marten would resect the submaxillary gland. Do you think there is a role for submaxillary resection with this kind of ptosis?

**Dr. Baker:** This is a matter of aesthetics. I know how many vital structures in that area may potentially be damaged, and that salivary leakage is possible. I abandoned total platysma transection because the anterior triangle would become accentuated, and patients would complain that they had a “hole” in that area. This woman has virtually no neck fat. If you remove more tissue, you will give her an even more emaciated neck.

**Dr. Stuzin:** Dr. Feldman, any comment?

**Dr. Feldman:** I do not like the appearance of that bulge in a neck. If you take off the superficial portion of the superficial lobe it will not create a hollow, but a pleasing contour. I leave the tail of the superficial lobe because of the facial artery and vein. I have not had any salivary fistulas, and I have never had an injury to the lingual nerve or the twelfth nerve.

**Dr. Stuzin:** Dr. Feldman, how do you handle a recurrent band after a corset? Do you ever see it?

**Dr. Feldman:** If it does not go away with time and Botox treatment, and it bothers the patient, I would open up the submental incision, free the skin and put some more sutures in, flattening out that redundant piece...
of muscle so it is smooth and then redrape the skin. I would not cut the band.

**Dr. Stuzin:** The next patient is a 40-year-old woman who wants to improve her neck (Figure 2). She does not want a face lift, but she would accept a postauricular incision. Dr. Baker, how would you approach this?

**Dr. Baker:** The patient appears to have good skin tone, submental fat, and microgenia. An extended silastic chin implant with either closed or open neck lipoplasty would yield a nice improvement with minimal scarring. It is usually not necessary to perform a platysmaplasty when you combine lipoplasty with a chin implant and remove the submandibular fat. The result is really quite dramatic. The patient’s glands are palpable, and she has some subplatysmal fat. However, she has a round face, and you might skeletonize the submental area. If she had facial laxity and was interested in a face lift, I might give her that option, but I would also tell her that she can get an excellent result at her age with a much simpler operation that produces much less scarring.

**Dr. Stuzin:** Dr. Feldman, what is your view?

**Dr. Feldman:** The patient has excess subcutaneous fat in the upper half of her neck and along the jaw line that is actually hiding her jaw line. I do not believe that lipoplasty alone will give her a terrific result. She probably has excess subplatysmal fat that needs removal, and she may have a little bow-strung suprahyoid fascia that needs release.

**Dr. Stuzin:** Do you believe you can take out subplatysmal fat with lipoplasty?

**Dr. Feldman:** I never attempt to remove subplatysmal fat because it creates a “lollypop” deformity, making patients appear too “overdone” in the submental area compared with the rest of the neck. This patient also has a very short neck.

**Dr. Feldman:** If you inserted a chin implant and suctioned her neck, you might get an acceptable result. For the best result, I would need to open the neck. During surgery, I can tell what to do under the platysma. The patient may need subplatysmal fat removal, release of the suprahyoid fascia, and work on the anterior digastrics, but I cannot evaluate this until I am operating. The patient needs a chin implant, but I believe she could have a nice-looking neck and jaw line without a preauricular incision. I would use a submental, and a postauricular incision for access. It should be made very clear to her that the downturn in the cheeks near the corners of her mouth would not in any way be improved by a neck lift alone.

**Dr. Stuzin:** Why use the postauricular incision?

**Dr. Feldman:** It facilitates undermining and visualization. I would start the incision just in front of her earlobe, because it is easier to see into the lower cheek and along the jaw line. The incision, used for access only, runs up in the crease behind the ear to the top, and then complicated and increases the risks.

**Dr. Stuzin:** Dr. Feldman’s point is that the patient has subplatysmal fat, and you said that you would remove it with lipoplasty.

**Dr. Baker:** Usually I do not remove subplatysmal fat because it creates a “lollypop” deformity, making patients appear too “overdone” in the submental area compared with the rest of the neck. This patient also has a very short neck.
transversely posterior for about 2 cm to the hairline edge. Neck skin would not be excised, and the scar would be completely hidden even with her hair pulled back. I would remove the fat in the lower cheek and taper it over the jaw line and into the neck giving her an elegant-looking jaw line. Precise jaw line definition is very important, but it is also important to leave an adequate fat cushion on the cheek/neck skin flap undersurface.

**Dr. Stuzin:** Can you tell us more about the suprahyoid fascial release?

**Dr. Feldman:** After the subcutaneous fat removal, I would assess if there were any residual fullness in the submental area or a blunted hyoid angle. If there were, I would open the platysma along the midline and take out excess subplatysmal fat overlying the anterior digastric muscles and hyoid region. After the subplatysmal lipectomy, if I then saw a little “bowstringing” of the white fascia, just above the hyoid, I would take out little bits of fascia with the needle tip cautery to create a better hyoid angle. Once that is done, if there were residual “bowstringing” of the lower anterior digastic muscles, where they attach to the hyoid, then I would lightly release them to get a perfect hyoid angle. I would then perform a corset platysmaplasty, which is crucial. If you remove the deep fat and perform the releases, you really need to do a superb muscle reconstruction. Otherwise, you leave a depression in the submental area or skeletonization of the thyroid cartilage or some other irregularity.

**Dr. Stuzin:** Is the clinical effect of the fascial release around the hyoid to allow the hyoid to become repositioned superiorly and posteriorly?

**Dr. Feldman:** No, the hyoid stays exactly where it is. The fascia just cephalad to the hyoid in some patients is a little oblique and “bowstrung.” To create more of a right angle, so there is less obliquity to the hyoid angle, you release very lightly or take out tiny little bits of this deep white fascia. This allows the hyoid angle to deepen a bit, but the hyoid stays exactly where it was.

**Dr. Stuzin:** What do you think is the aesthetic effect of removing some of the anterior belly of the digastric muscle?

**Dr. Feldman:** I rarely do it, but the anterior digastrics can be big and bulky in some patients, particularly in patients who have full fatty necks. I assess the digastrics after the subplatysmal lipectomy. If the muscles are of moderate size, I flatten them by joining them together in the midline with a running suture up and down, just like a “mini corset” operation. You have to work carefully because the muscle is fragile and the sutures tear out easily. Running a suture along the midline will tuck the muscles and flatten them. If they are really bulky, then I take off the top half or two thirds with the needle tip cautery and then I plicate them with a suture, but I do not do this very often. I also would recommend a chin implant for this patient.

**Dr. Stuzin:** Dr. Marten, what would you suggest for this patient?

**Dr. Marten:** I am not sure that her neck is her worst feature, even if she thinks so. She has a sad, melanchooly look, a low brow with a masculine eyebrow configuration, ptotic cheeks, platysma laxity, a recessive chin, and a retrognathic mandible. Lip strain suggesting malocclusion is also present. She would benefit from surgery on her cheeks and forehead, but she is concerned with her neck and I would be guided by what she wants. I would advise her that the simplest approach would be submental lipoplasty alone or submental lipoplasty with a chin implant. Patients like this typically have lifelong cervicomental obtusity with a family history of poor cervical contour. That is a tip-off that subplatysmal fat is present and that the improvement obtained from lipoplasty alone would likely be limited. If the patient were looking for more comprehensive treatment, then I would recommend an open neck lift through a submental incision along with a chin implant.

**Dr. Stuzin:** Would you use the postauricular incision as well?

**Dr. Marten:** I do not believe that would be necessary. Sustained improvement in neck contour cannot be created by pulling on the skin; it is created by what is done to the structures disrupting contour underneath. In addition, neck skin will redistribute itself nicely in most patients in this age group. Comprehensive treatment of this patient’s neck would likely require reduction of her submandibular glands and possibly the digastic muscles.
(Figure 3). Dr. Baker, how would you approach treating this patient?

**Dr. Baker:** She has submental fat, skin laxity, and jowling so she needs a fairly aggressive vertical lift. This is someone in whom the short scar technique, a temporal hairline incision, and a strong lift in the midface would create a great result.

**Dr. Stuzin:** Would you lift the midface through a SMASectomy?

**Dr. Baker:** Yes. And I would start by determining whether the patient had platysma bands. If not, I could probably get good results simply with closed lipoplasty. In this woman, the submandibular glands will become a little more prominent once the fat is removed. If she had excessive skin, I would simply extend the incision back into the hair. I would use a submental incision for platysma bands that appear with animation or thick bands that I thought were contributing to submental deformity. In that case, I would remove the fat and perform the platysma excision, reapproximating the bands. That helps with the vertical pull and jawline redefinition in the short scar technique.

**Dr. Stuzin:** How important is a SMASectomy in improving neck contour?

**Dr. Baker:** The only time I perform the SMASectomy is in a patient like this with a full face with extra fat. I might remove 1 or 2 cm to advance the SMAS to the parotid fascia. I usually use a 2-0 Maxon (Tyco Healthcare Group, Norwalk, CT) or PDS (Ethicon Inc, Somerville, NJ) suture to get a really tight pull. And then I create a vertical direction in the submental area if I have done a platysmaplasty. The vertical pull is in the opposite direction, which defines the jawline and helps me to avoid performing a retroauricular incision.

**Dr. Stuzin:** If you were to perform a cheek lift, what technique do you prefer?

**Dr. Feldman:** I would perform a deep plane dissection, with an extensive sub-SMAS dissection. I would also do a small incision lateral brow lift to get rid of the lateral brow redundancy, some transconjunctival fat removal in her lower lid, and I would remove a narrow strip of skin from the lower lids to create a little vertical lifting in the lower eyelid/cheek interface. Using a 2-0 PDS suture I would securely anchor the cuff of SMAS on the undersurface of the cheek flap to the periosteum over the lateral zygomatic arch in front of the upper ear to the SMAS flap at the superior ear margin. I would then add a couple of other fixation sutures in the SMAS cuff to get a firm hold of that cheek flap.

**Dr. Stuzin:** Dr. Marten, how would you improve this patient’s appearance?
Dr. Marten: This patient has pansfacial aging with significant forehead, cheek, and jowl ptosis; a full neck with excess fat; some redundant skin; and some deeper problems including submandibular gland prominence. These problems are accentuated by microgenia and retragnathia. She would benefit from a full facial rejuvenation that included surgery on her forehead, eyes, face, neck, and chin.

Dr. Stuzin: How do you think a high SMAS technique would affect her cervical contour? What is the role of the SMAS in affecting cervical contour?

Dr. Marten: I believe that neck lift results are better when I perform a concomitant face lift. The cheek SMAS is my vehicle for repositioning midface fat, the perioral area, the jowl, and ptotic tissue along the jawline. If an isolated necklift is performed on a patient in this age group, the face is in essence pulled down into the neck when platysmaplasty is performed. I believe this creates a bottom heavy, square, masculine face and performed. I believe this creates a botthe face is in essence pulled down into the neck when SMAS is my vehicle for repositioning midface fat, the perioral area, and ptotic tissue along the jawline. If an isolated necklift is performed on a patient in this age group, the face is in essence pulled down into the neck when platysmaplasty is performed. I believe this creates a bottom heavy, square, masculine face and compromised overall improvement. SMAS repositioning improves cheek and jaw line contour and shifts skin superiority. This results in a more feminine, harmonious appearance and better tissue redraping in the neck.

Dr. Stuzin: Do you always reposition the SMAS before the neck?

Dr. Marten: Yes, it isn’t the easiest way, but it is the best. Otherwise, improvement in the midface cheek and jowl is compromised. First, I raise cheek SMAS flaps. Then, working through a submental incision, I lift the platysma, remove subplatysmal fat, and reduce the submandibular glands and digastric muscles, if necessary, before SMAS flaps are sutured. If the SMAS is sutured first, the submental skin will be tight, and it will be difficult to work in the neck. After neck maneuvers are complete, the SMAS flaps are sutured. After that, I return to the neck and perform platysmaplasty and platysmamyotomy. The final step is the suturing of the postauricular transposition flaps to create a mastoid-to-mastoid sling of platysma across the neck.

Dr. Stuzin: Dr. Feldman, your approach is different because you prefer to do a lot of your work through the neck, and that brings the platysma back down into the neck rather than what Dr. Marten is doing, which is repositioning descended platysma superiorly in the face before he does the platysmaplasty. Do you want to comment on that?

Dr. Feldman: That is correct. I advance the platysma to the midline with the midline suturing. Frequently, I will do some vertical pleating in the submandibular region. But do I might really do any pulling back of the platysma in the neck. I advance it anteriorly. I do not believe you have to pull it backwards to get a good neck contour.

Dr. Stuzin: Dr. Marten’s point is that he would rather take that descended soft tissue and superiorly reposition it in the face. But if you do the platysmaplasty first, you are repositioning descended soft tissue even lower into the neck.

Dr. Feldman: I do not believe it is a problem. After I have done anterior platysma work, if I have brought a little more jaw line fat down below the jaw line then I trim it off under direct vision. I work back and forth so I can tailor the contouring over the jaw line. Essentially, what I do in the cheek is separate from what I do in the neck. They go together, but I do not rely on what I do in the neck to help me in the cheek or visa versa.

Dr. Stuzin: Dr. Marten, do you think an important part of your procedure is blending her chin with her neck after you have done the deep layer work and eliminated the submental redundancy?

Dr. Marten: Yes, the order in which neck maneuvers are performed is very important. Although many surgeons prefer to start the neck procedure with submental lipoplasty, I do not. I regard subcutaneous neck fat as artistic clay and like to preserve it until I am absolutely sure it needs to be sacrificed. Typically, I do everything I can to the deep structures of the neck to create contour. I then blend the subcutaneous fat of the cheek, chin, jowl, and neck together as the last step after all other maneuvers are performed. If subcutaneous neck fat is removed first, you lose the opportunity to sculpt the neck in this way. I think it is better to leave a generous layer of preplatysmal fat and create contour by removing subplatysmal fat and modifying other deep neck structures because preplatysmal fat makes the neck look young, soft, and natural.

Dr. Stuzin: Dr. Feldman, what would you do if she had a more ptotic chin pad?
Dr. Feldman: I would get rid of the ptotic tissues. Sometimes it is just a matter of removing a little strip of skin and fat from the lower chin with a simple elliptical incision. If there is a lot of ptosis, however, I undermine a chin skin flap with a little fat on its undersurface, and after I have turned that flap back, I remove a strip of fat that is overlapping the periosteum. Then I bring down the skin flap over the submental incision, mark it directly, and trim it off. I believe a chin implant would also help this patient.

Dr. Stuzin: Dr. Baker, what do you do for chin ptosis?

Dr. Baker: I might perform a small chin implant. I might not resect the crease but, instead, deepithelialize it, advancing the submental skin forward to fill it. In this patient I believe I could accomplish it all with lipoplasty and resculpting the area, as well as the lift.

Dr. Stuzin: The next patient is a 50-year-old woman who is requesting a face lift and cervical improvement (Figure 4). Dr. Baker, what would you recommend?

Dr. Baker: She obviously has very large, ptotic submandibular glands. I would discuss these glands with her and suggest that she might benefit from a small chin implant. In patients like this, I have tried to create a sling by tightening the platysma, suturing it together in the submental area, and then pulling it tightly laterally. But the muscle stretches out. These glands will eventually fall back down even if you oversew the muscle.

Dr. Stuzin: Could you do a short scar technique on her?

Dr. Baker: Possibly, because her neck skin is good without much laxity.

Dr. Stuzin: Would you make a submental incision and tighten the platysma?

Dr. Baker: If the glands concerned her, I would definitely point out that only a temporary improvement could be achieved, that the glands will fall back down.

Dr. Stuzin: Dr. Feldman, how would you approach treating her?

Dr. Feldman: The most obvious characteristic of her neck is that very large submandibular gland. If the gland bulge were found only on that right side then I might be concerned about some disease because it is very big. If the glands are enlarged on both sides then I would not be concerned. The patient has some submental skin and platysma laxity. She has some jowling that looks like a crescent of subcutaneous fat overlapping the jaw line, which is sitting on top of the submandibular gland bulge. Perhaps she has a little excess subcutaneous or subplatysmal fat, but I cannot tell from the photo. She also has a small chin. I would use a submental incision only, and through this incision I would undermine the neck and the cheek above the jaw line. Perhaps I would insert a small chin implant. I would trim her jowl fat with scissors or cautery under direct vision, remove a good portion of the submandibular salivary gland, perform a corset platysmaplasty and then redistribute the excess neck skin without any skin removal. The main problem is her glands. I probably would not operate on her neck unless she was comfortable with removal of the superficial portion of the glands, because I do not believe I can give her a good-looking neck without this.

Dr. Stuzin: When you remove the glands from a patient like this as an isolated procedure, how much induration will there be? What is the recovery period?

Dr. Feldman: In a month or 6 weeks, most patients look fine.

Dr. Stuzin: Dr. Marten, what would you do?

Dr. Marten: This woman has pansfacial aging, a ptotic brow hiding under her bangs, perioral and mid-face laxity, an unusually large submandibular gland, mild microgenia, and cervical obliquity. Her submandibular gland is large enough
that I would consider a workup to be sure it is not a primary tumor if it was irregular and firm on palpation. Occasionally, I see a submental bulge like hers and think it is going to be a prominent submandibular gland but when I palpate it, I discover it to be soft jowl fat. I doubt this is the case in this patient, however.

I believe this patient would benefit from panfacial rejuvenation that included forehead lift, eyelid surgery, face lift, and neck lift. I would perform a high SMAS face lift because an isolated neck lift would enhance facial squareness and pull her already ptotic face into her neck. I often do isolated necklifts in men, however, because facial squareness is aesthetically more appropriate and better accepted in them. Her neck would be approached through a postauricular and submental incision. The submental incision would not be made directly in the submental crease because this would reinforce it and enhance her double chin or witch’s chin appearance. It is better to make it a centimeter or so posterior to the crease. I would leave most of her preplatysmal fat, of which there is not a whole lot. Her fat is subplatysmal. The platysma muscles would be raised, subplatysmal fat removed, and the submandibular glands reduced. I would then perform platysmaplasty and platysmamyotomy.

**Dr. Stuzin:** Dr. Marten, in reducing the gland, Dr. Feldman removes the superficial lobe. What do you remove?

**Dr. Marten:** I take the protruding portion, the part that disrupts cervical contour. There is never an aesthetic need to completely remove a submandibular gland.

**Dr. Stuzin:** When you take out the glands, do you usually remove the more caudal aspects?

**Dr. Marten:** Yes, I remove the caudal aspect.

**Dr. Stuzin:** And Dr. Feldman, when you remove it, do you take out the caudal aspects or the more anterior aspects?

**Dr. Feldman:** It is the more superficial part of the gland. The deep portion of the gland goes underneath the lateral border of the mylohyoid muscle and you do not have to take that out at all. So I agree with Dr. Marten that you take out whatever is necessary from the jaw line down. Sometimes, it may be almost the entire superficial lobe of the gland, in other patients, less.

**Dr. Marten:** The landmarks I use for contouring the submandibular gland are the anterior belly of the digastric muscle and the ipsilateral border of the mandible. If you envision a plane tangent to these 2 structures, any part of the gland that protrudes inferior to that plane is disrupting cervical contour and is the part that needs to come out. I am sure Dr. Feldman does it instinctively, but those with less experience should look to create a flat contour between those 2 structures.