Using Fillers for Lower Facial Sculpting

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The use of fillers for the middle of the face has been well described and these products have been used for more than 25 years. Injecting fillers of these products into the lower third of the face is more technically challenging but also has the potential to make a dramatic difference to the patient and to brand the physician as an expert. Treatment of the marionette lines, prejowl sulcus, and chin can dramatically alter a patient's self-image. Hyalurons, calcium hydroxylapatite, and collagen can all be utilized for these areas with differing degrees of success.

One of my favorite areas to fill is the prejowl sulcus. Patients typically come to me with complaints of jowls. Patients will often use their hands to pull their faces back to see what a face-lift would look like. Magically, their jowls disappear when the skin is pulled in the right direction. Unfortunately, surgery rarely provides the exact vectors as a makeshift, manual face-lift; however, sometimes adding volume can help to address underlying issues.

Jowls are usually caused by midface and lower face descent, laxity of the skin, and changes in the retention structures for the lower face. Definitive treatment of the area may require liposuction, rhytidectomy, or both, but many patients are reluctant to undergo these procedures. In my practice, I am fortunate to have good plastic surgeons in my community so that I can obtain other perspectives. I recommend a plastic surgery consultation for patients who are not clear-cut candidates to receive fillers. The caveat here is to be sure to refer an experienced face-lift surgeon.

A less invasive alternative is to use fillers to augment the depression that lies between the mid ramus and the chin. Selecting a filler for this area depends on several factors, including the thickness of the patient's skin whether elevating a crease or filling in a wrinkle and the tolerance of the patient for risks. Patients who are thick skinned (typically, Fitzpatrick skin type III and greater) and who require replacement of large amounts of volume will benefit from the buttressing provided by hyaluronic acid (HA) or calcium hydroxylapatite (CaHA) because they decrease the sulcus. By applying firm pressure to the product along the inferior aspect of the ramus, it is possible to mold HA to create a more defined jawline. This hallmark of youth is one of the most appreciated procedures performed in my practice.

Marionette lines are much easier to treat and can be injected with a variety of products. There are 2 components to evaluating and treating marionette lines. The first component is the orientation of the corner of the mouth, and the second component is the line emanating from it.

As we age, soft tissue and bone cause the corners of the mouth to begin to point downwards instead of being oriented in a more neutral, horizontal position. The actions of the depressor anguli oris accentuate this downward trend. Injecting marionette lines should address both of these aspects and may require different fillers. Treating the corner of the mouth is best achieved by grasping the corner between the thumb and forefinger of one's nondominant hand. Everting the tissue into the desired configuration will help to attain an aesthetically pleasing outcome. I recommend a fanning technique with the needle inserted in the corner of the mouth.

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Patient with a slight recessed chin (A) and after hyaluronic acid injections into the chin (B), with improvement noted in the shape of the chin.

As with other locations, the choice of filler depends on various factors. For the marionette lines, I use the hyalurons frequently for the area immediately adjacent to the vermilion. To provide definition of the lateral lower lip, I inject filler into the rolled border and vermilion of the lateral 2 to 3 mm of the lip. This provides some volume and helps restore the shape of the mouth to a more youthful appearance. Once I have addressed the more difficult corners of the mouth, I turn my attention to the marionette line proper. Typically, injecting this area is relatively simple and is best accomplished by grasping the fold and injecting the filler in using a serial puncture or linear threading technique.

For most patients, using HA, CaHA, and collagen-based fillers will be suitable for marionette lines. The hyalurons have the advantage of being injected into the lips, as well as being clear so they may be placed close to the epidermis when needed.

The chin is another undertreated area of the face. The 2 different facets of the chin that may be enhanced with fillers are the mental crease and the projection of the chin. Injections into the mental crease are best performed by using a serial puncture or linear threading technique. The choice of filler to use depends on what other areas are being treated. Typically, this area is not treated in isolation and it is beneficial to use the same product when possible. Fillers such as HA, CaHA, and collagen are all good choices and each one typically requires about 0.5 to 1.0 mL of product to resolve a moderate crease. As with other filler injections, the use of botulinum toxins will help to improve the outcome and duration of this procedure.

Injections into the chin to alter the projection of the chin are also technically simple and may provide dramatic improvements in the appearance (on par with nasal sculpting). Slight recession of the chin can alter the appearance of the entire face, and by improving its projection forward, the appearance of the face can be greatly improved. One example of this is a woman with a somewhat recessed chin (Figure, A). By injecting a thicker HA, the shape of the chin was improved (Figure, B). Other fillers such as CaHA may be utilized as well. Duration of the enhancement is approximately 6 to 9 months for HA and 8 to 12 months for CaHA.[1]

Adjunctive therapy with botulinum toxins may help to improve outcomes in the lower face. For the marionette lines, it is helpful to treat the depressor anguli oris with 2 to 3 U on each side. The mentalis may also be treated with 3 to 5 U to help improve the appearance of the skin and to decrease its depressor action. Injections into the platysma can help to reduce the downward pull of this muscle on the lower third of the face and should be considered when injecting fillers in this location. Technical considerations for injecting botulinum toxins are well described elsewhere and it suffices to simply advise injecting small amounts of toxins and observe the synergy with fillers.[2]

The lower third of the face is perhaps the most undertreated and potentially rewarding area for soft tissue augmentation. When injecting the lower third face, product selection is paramount. I recommend treating the marionette lines, mental crease, chin, and prejowl sulcus conservatively until proficiency has been achieved. Injecting botulinum toxins can help to not only improve the appearance of the filler but also to increase the duration. Choose fillers that can be digested when beginning to treat the lower face. In the event the physician or the patient is not pleased with the outcome, the correction can be softened. Treating the lower face has the potential to greatly improve patient satisfaction with treatments.

REFERENCES

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