147 Achieving Beautiful Lip Augmentation

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Consultation

Achieving successful and beautiful lip augmentation is a balance of the physician's aesthetic eye, the patient's natural anatomy, and the patient's desired look. A key to a satisfied patient is to understand the patient's concerns and goals. This is established during the consultation, in which the patient's goals for her lips are discussed. Does a patient want her lips larger or simply to have better definition when applying lip liner? Patients have unique preferences, such as whether he or she wants the upper lip larger or smaller than the lower lip or how large the lip should be. Some want central fullness, while others desire a full lip across the entire length. These goals are discussed in the context of the examination period. Some patients have very thin lips, which may not be amenable to the goals that they have in mind. Some have a very long distance from the nose to the vermillion border and augmentation would make a heavy protruding upper lip. Many patients are afraid to have the lip overdone and need reassurance that enhancement can be very natural and undetectable. Patients with a history of herpes simplex virus may need to be treated prior to the procedure. Allergies and filler choices are discussed as well. The discussion will therefore outline a reasonable outcome, duration, expense, risks, and benefits.

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Anesthesia

The lips are by far the most sensitive area for injecting fillers of the face. I have found that ice and topical anesthetics are adequate only for the injection of collagen products that contain local anesthetic and are less viscous, flowing through tissue without resistance. For the use of any other filler, such as hyaluronic acid or fat, nerve blocks or sulcus blocks (Niamtu 2005) are utilized with 1 % lidocaine, with or without epinephrine. If the patient has numerous vertical rhytides, a sulcus block is not utilized, as the edema from the anesthetic may obliterate some of these lines. However, patients may prefer the sulcus block, because the anesthetic wears off quickly—within an hour. One should try to use the least amount of local anesthetic to achieve anesthesia so as not alter the natural anatomy of the lip. A recently described means of applying topical anesthetic to mucosal membranes has been described, but has not been reproducible in the initial attempts at our office (Smith and Melnychuk 2005).

Choice of Filler

My filler of choice for the lips is nonanimal-based hyaluronic acid (Restylane and Juvederm). This filler has excellent longevity in the vermillion border (6–10 months), minimal morbidity, and very few side effects. Collagen products, both bovine and bioengineered, have excellent flow

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characteristics, but their longevity is roughly half that of hyaluronic acids. Other hyaluronic acid products (Hylaform, Perlane, Captique) are also available, and the reader may prefer some of these for ease of low versus firmness desired in the lip. Permanent or semipermanent fillers, such as Radiesse, Artefill, and Sculptra, are generally contraindicated for the vermillion of the lip due to risk of nodularity. After utilizing hyaluronic products, a seasoned patient may elect other offerings, such as silicone, new softer Gore-Tex implants, or fat injections. Silicone is used by some practitioners, but fear of long-term side effects limits its use. Autologous fat seems to have a relatively low level of "take" in the lips compared to other sites, but does have potential for permanence without nodularity.

Anatomic Guidelines

The lip is subdivided into red and white segments at a well-defined and arched vermillion border. The philtrum is the vertical depression at the center of the upper lip, bordered on either side by philtral columns. The upper lip is generally M-shaped, with a cupid's bow representing two anatomic mounds at the highest point of the bow, with a midline tubercle. The lower lip is slightly W-shaped, with two lateral lobes and a midline groove. The upper lip is more arched, wider, and longer than the lower lip. The upper lip vermillion is generally less than the lower lip height, although this varies from individual to individual. The upper lip projects approximately 2 mm more than the lower lip.

Elements to consider when injecting the lip include:

- Upper lip shape
- Lower lip shape
- Philtral columns
- Balance of the upper and lower lip
- Texture of the lip
- Definition
- Natural movement

Technique

The patient is seated upright with the head resting on the chair. Divide the lip into quadrants and inject the right upper, the left upper, the left lower, and the right lower, in that order, switching sides of the table. First inject the vermillion border space, starting at the lateral-most aspect of the right upper lip and inject toward the center. The skin is stretched between the thumb and index finger of the nondominant hand while the needle is inserted at the vermillion border. The filler will travel along the vermillion border space to variable degrees. Hyaluronic products rarely flow along the entire border. Inject until the filler seems to stop and continue on from that point along the vermillion border. At times the vermillion space will extend above the actual vermillion into a well-defined white roll. Injecting this more superior space may result in an artificial white accentuation of this natural anatomy. I therefore try to inject on the red edge of the vermillion border space (Fig. 147.1). Inject to the peak of the Cupid's bow. Observe how much filler is required, then cross the table and inject the same quantity in a similar fashion. It is important to note the quantities injected, because patients will feel if one side is heavier and

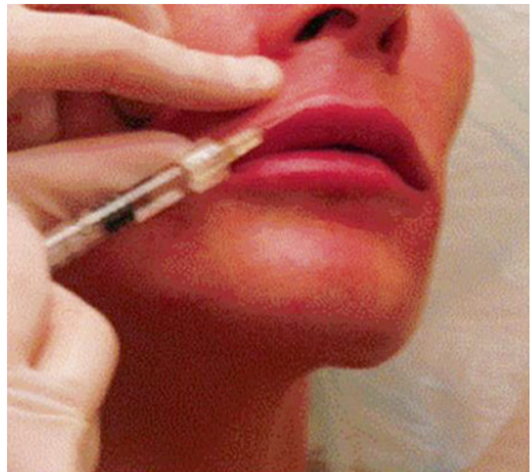

Fig. 147.1 Injection along the red edge of the vermillion border rather than the white edge prevents artifical white line above the lip

injected with more material than the other. Asymmetries should be considered, however. One side may require more than the other. Depending on the anatomy of the Cupid's bow, inject along the Cupid's bow bilaterally from the center of the bow. If the center portion of the Cupid's bow is too wide, it is helpful not to inject this area as one can narrow the Cupid's bow when the filler on either side pushes against it.

Then inject the left lower lip along the vermillion space starting at the lateral most aspect and injecting centrally. Usually two to three separate entry sites are required due to the material ceasing to flow along the border. It is best not to force the filler if resistance is felt to avoid lumpiness or inadvertent focal filling. The right lower lip is then injected in a similar fashion. If the patient has lost some of the natural anatomy along the philtral columns, these are injected at this time. The goal is to create a natural-appearing lip. If further volume enhancement is desired, the actual vermillion is next injected. This is often confined to the four central mounds of the vermillion itself. One or two linear threads of filler are placed along these four areas of greatest lip height. Sometimes enhancement is needed along the lateral vermillion as well if the lip is puckering or wrinkling laterally. This will widen the upper lip. To address downturning of the lower lip, the filler is also injected in and around the modiolus. As described by Klein (2005), the lateral lower lip often requires buttressing in the marionette area to prevent downturning and to fill the marionette area. It is important to treat surrounding volume loss in the lip, particularly in the marionette area, to support the extra weight that one is adding to the lip with filler.

I generally treat patients conservatively the first time with 1 ml of filler material in order for the patient to become used to the new appearance. Sudden dramatic enlargement of the lip can be rather startling to the patient or his or her family. It is preferable that the patient asks for more volume with subsequent treatment rather than feel upset with overcorrection after the first session. After filling the lips, excessive perioral muscle movement of the orbicularis oris or depressor anguli oris can be addressed with small quantities of botulinum toxin (Carruthers and Carruthers 2003).

Summary

Augmentation of the lips is a very artistic and satisfying endeavor for both the patient and the cosmetic surgeon. The goals are natural enhancement, emphasizing the vermillion border, and optimizing anatomical landmarks (Fig. 147.2).

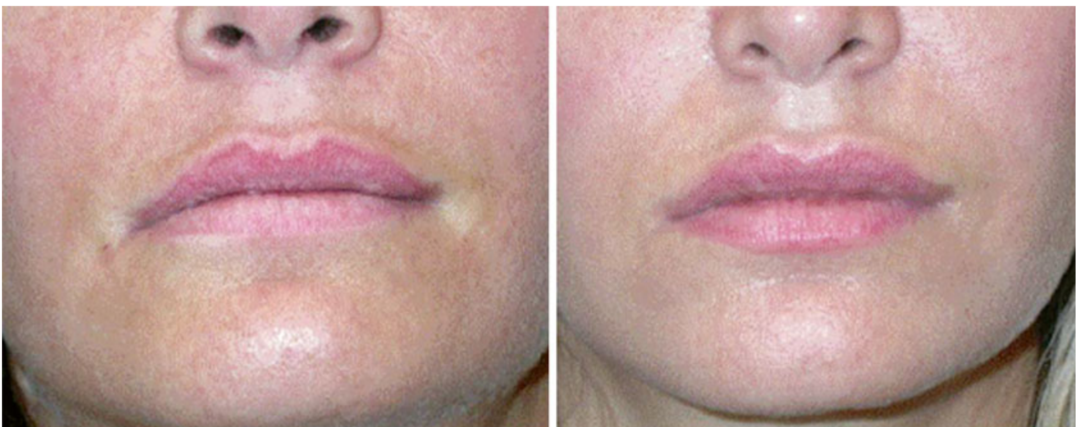

Fig. 147.2 Injection of 1 ml of hyaluronate filler along the vermillion border and red upper lip. Avoiding injection of the cupid's blow narrowed its width

Atrophic volume changes in the lip and surrounding areas are addressed as well. Attention to detail involves addressing the shape of the cupid's bow, the need for enhancement along the philtral columns, and discussing with the patient his or her preferred lip shape. Small quantities of botulinum toxin to perioral muscles can enhance results and extend the longevity of the filler. Long-term goals should be considered so that if the patient wants a trendy, exciting look, the filler should be temporary. As patients become more comfortable with enhancement, more volume is added in subsequent sessions.

References

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