Fillers for the Décolletage Area

Fillers offer patients an alternative to device-based interventions for chest rejuvenation.

BY SABRINA GUILLEN FABI, MD

New innovations in facial rejuvenation over the past 10 years have revolutionized how we treat the face. While these advancements have created many new opportunities for patients and physicians, it has also arguably drawn attention to non-facial areas of the body, albeit indirectly. As patients achieve a more youthful appearance through facial rejuvenation procedures, the juxtaposition of the rejuvenated face with photodamaged skin on their neck and chest (décolletage) can create a noticeably stark contrast. In other words, the face doesn't match the body.

While many modalities can be used off the face—including microfocused ultrasound with visualization, chemical peels, photodynamic therapy (PDT), sclerotherapy, intense pulsed light (IPL), q-switched lasers, as well as both ablative and nonablative fractionated lasers and ablative fractionated lasers—the neck and chest provide unique challenges to clinicians due to the anatomical differences in the skin. While some of these technologies can be very effective, not all practices employ a bevy of devices. Therefore, gaining familiarity with the use of injectables in off-the-face areas can be very beneficial when these agents are used appropriately.

While injectables have gained increased recognition for off-face applications, particularly with the recent approvals of Radiesse (Merz) for hands and Kybella (Kythera) for submental chin fat, new studies have delved further into the use of fillers specifically in the décolletage area, finding that they can be very effective. Ahead, I will share pearls for treatment of the décolletage with fillers.

ANATOMY OF CHEST SKIN AND TISSUE

When using injectables on or off label, a deep understanding of the anatomy is critical. When it comes to using fillers in the chest, we should be aware of the layers of the superficial chest wall, which include (from superficial to deep) skin, subcutaneous fat, pectoralis major, fat, pectoralis minor (arising in the midclavicular line), and ribs.[1,2]

One thing worth noting about the skin in this area is that it has a thinner epidermis and dermis compared to facial skin.[3,4] In Caucasians, the epidermis and dermis have been reported to be 39-44µm and 1319-1400µm thick, respectively.[5,6] The chest also demonstrates variable distribution of subcutaneous fat and decreased pilosebaceous units compared to facial skin.[4,7]

Given these conditions, many of the fractionated CO_2 treatments that we tend to use for resurfacing are not as effective, simply because we have to decrease our energy setting to avoid scarring. The decrease in pilosebaceous units in that area leads to slower healing and a higher risk of complications, such as scarring and pigmentary changes, as well, particularly with deeper chemical peels and ablative laser therapy.[8] Therefore, modalities such as fillers present a viable alternative, along with microfocused ultrasound and nonablative laser and light sources in certain capacities.

TREATMENT

PLLA. One agent that can be particularly useful for the chest is poly-L-lactic acid (PLLA) (Sculptra, Galderma). PLLA is a biocompatible, biodegradable, immunologically inert semipermanent synthetic soft tissue biostiumator that induces gradual neocollagenesis by fibroblasts. It is generally injected into the reticular dermis and subcutaneous tissue planes; correction can last two years or longer.[10,12] Though the most common complications of PLLA injection include pain, ecchymoses, edema, pruritus, and hematomas, arguably the best-known complication of PLLA is nodule formation.[7,9-11]

For rejuvenation of chest rhytides, a 16mL dilution is the ideal dose. In a recent retrospective evaluation using PLLA

PRACTICAL POINTER

In the post-treatment period, it is important to inform patients about the importance of massaging the treatment area as collagen stimulation occurs. The "5-5-5" rule, in which the patient massages the treatment area for five minutes, five times per day, for five days, is an easy way to instruct patients.

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for chest rhytides performed at our practice, we found dilutions of 16mL showed the best improvement in chest rhytides, with no adverse effects.[12] Typically, we reconstitute a single vial of PLLA with 1mL of 1% lidocaine with or without epinephrine and 7ml of bacteriostatic water. This is done anywhere between two hours pre-injection or a full day before. We agitate the reconstituted product with a Vortex Genie mixing device (Scientific Industries, Inc.) immediately prior to injection and then withdraw 1.5ml into a 3ml syringe. Next, we withdraw another 1.5ml of bacteriostatic water into the syringe, combining for total volume of 3mL. We repeat this until we have a final total of 16mL, mixed and withdrawn into the syringes.

In our practice, we have not found a need to administer topical anesthetic, regional nerve block, or ice application prior to PLLA injection. We simply cleanse the treatment area with alcohol and begin treatment thereafter. A 25-gauge, 1.5-inch needle tends to be effective for this product and area, though you may consider using a cannula to minimize reticular vein puncture. I recommend starting with rhytides centrally between the breasts then proceeding laterally and superiorly in the plane of the subcutaneous fat using a retrograde linear threading technique. The boundaries of the treatment area are the suprasternal notch superiorly, the mid-clavicular line laterally, and the fourth rib inferiolaterally.[13]

TAKE NOTE

The neck and chest provide unique challenges to clinicians due to the anatomical differences in the skin. Moreover, not all practices or patients have the option to pursue device-based rejuvenation for these areas. When used appropriately, fillers provide a viable alternative for chest rejuvenation. Importantly, appropriate pre-treatment and post-treatment measures must be followed for optimal outcomes.

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Avoiding overcorrection is important in view of the fact that the treatment effect is gradual and will be more apparent as neocollagenesis progresses. After injection, massaging the area vigorously is key. This ensures equal dispersion of the PLLA microparticles with a resultant decrease in the incidence of nodule formation.[3,10] Sometimes, applying a soapy cleanser to the chest can make the massage easier to perform.

In terms of frequency of treatment, it is best to allow at least four weeks between injections; Typically three to four treatments are optimal. Post-treatment, it is important to inform patients that the injection fluid will be resorbed over the next few days and collagen stimulation will follow. We instruct patients to follow the "5-5-5" rule of massaging: massage the treatment area for five minutes, five times per day, for five days.

Hyaluronic Acid. For chest treatment, hyaluronic acid has also been used.[3] I typically use a 22.5mg/ml monophasic HA filler such as Beletro Balance (Merz), mixed in a 1:1 dilution with 1 part Belotero:1 part 0.8cc of normal saline and 0.2cc's of 1% lidocaine with a 30- or 32-gauge needle, the longevity of correction is anywhere between six to eight months. Additionally, the injection plane should be the superficial dermis, where the product will more easily intercalate into the dermis than more viscous NASHA products, giving the patient an even, smoother cosmetic appearance without Tyndall effect.[14]

However, it is worth noting that depending on the severity and depth of the chest rhytides, most patients will likely find it more cost effective to opt for two to three vials of PLLA (one vial per session), with sessions spaced

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one month apart. This can provide excellent correction for up to two years or longer without a touch-up. In addition, PLLA may also result in fewer nodules and surface irregularities than certain HAs on the chest, likely due to the depth of injection.

COMBINATIONS AND THE FUTURE

While fillers present a nice alternative to device-based approaches, those with access to both modalities can use them in a complimentary manner. For example, micro-focused ultrasound can actually be used on the same day as filler treatments, if desired. You can also follow this with IPL treatment, which can be great for patients with redness or brown spots, since it would be hard to appreciate additional volume without addressing the surface. Moreover, these procedures can all be done on the same day as PLLA treatment in the chest without an increased risk of adverse events.[15]

As the demand for body rejuvenation procedures continues to increase, we will continue to see expanded uses for our current non-invasive modalities. When used alone or in combination with other rejuvenation procedures, cosmetic injectables such as PLLA and HAs can provide patients and physicians with new opportunities for addressing what has historically been a challenging area to treat. With continued research and a growing therapeutic focus, the demand for the procedures is very likely to rise. ■

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