

# Facial Injectables

*The growing alternative to surgery*

By: Dr. Jon F. Harrell DO FACS

Do you know a friend or family member who has expressed concern over the aging changes they're seeing in their face? Perhaps you too have looked in the mirror and taken note of those lines around the eyes which have seemed to have become more noticeable. Or perhaps it's those frown lines between the eyebrows that make you appear angry or worried. Then again, it may be the folds extending from your nose down to your lips. Maybe it's just a minor issue you're just beginning to notice or perhaps it's beginning to concern you a little more than you'd like. At any rate, you are beginning to see the cumulative effects of aging starting to take hold.

For those of us who would like to address these early signs of aging, there is fortunately a growing number of products and treatments available to help us turn back the clock and refresh our appearance. Since the field of Aesthetic Medicine is rapidly growing, it's obvious that patients are embracing these less invasive therapies as a way of refreshing and rejuvenating their appearance – all with less downtime and usually less expense than traditional surgical approaches. In many instances, the less invasive approach is also the superior approach when assessing the final results. It's interesting to note that approximately 20,000 Injectables a day are performed by qualified physicians.

In this article, we'll discuss some of the most common facial Injectables and how they can fit into ones approach to facial rejuvenation.

## THE CURRENT STATE OF INJECTABLES

The godfather of facial Injectables was - and is - Collagen. It was derived from the dermis of cows, required skin testing to determine if one was allergic to the product and it had a very short lifespan so that results were relatively short-lived. Nevertheless, it was wildly popular and I vividly remember the many patients presenting for treatment to improve acne scars, wrinkles, to plump up thin lips and fill in small depressions in their skin.

Enter Botox some years later and suddenly a whole new arena opened up. There was finally a way to address the wrinkle lines that bothered so many patients and for which surgery seemed to be an extreme solution. Originally approved for treating the frown lines between the eyebrows, innovative physicians devised numerous 'off label' uses for this product and began treating the upper forehead lines, the 'crow's feet' lines, the lip wrinkles, and the neck muscles. There is even a technique to nonsurgically elevate the eyebrow (the Botox Brow lift). Botox is a protein which binds to the nerve receptors on the muscle where it is injected. This effectively eliminates the ability of the nerve to stimulate the muscle – thus resulting in weakening and absence of the wrinkle or frown line. Because the body eventually removes this Botox, the results are temporary, usually lasting from three to four months although some of my patients have reported results lasting up to six months long. Botox remains one of the most popular of all the Injectables and has been found to have a role in many non-aesthetic conditions as well. It is almost universally well tolerated and has a very low risk profile. Like any Injectable, safety depends upon a well-trained

and experienced injector, familiar with facial anatomy.

Restylane was the next filler to gain widespread acceptance in the medical community and it rapidly became popular with patients as well. It required no skin testing and lasted much longer than Collagen. A number of products similar to Restylane have entered the market since then, some that last longer and some that are thicker and offer some benefits in different areas of the face. These products are all made of Hyaluronic Acid which is compatible with human tissues. These fillers are used to augment lips, fill in the nasolabial folds, fill the depressions below the lower eyelids, add volume to the cheeks and fill in small depressions in the facial skin. It has been used to perform the 'Volume' or 'Liquid' Lift which can replace or delay face-lifting in many patients. Because of their compatibility with the skin and their many indications the family of Hyaluronic Acid, fillers such as Restylane, Juvederm, Perlane, etc. have become the workhorses of facial fillers.

Other products have entered the Injectable market as well since Restylane made its debut. Many of these are unique and have characteristics that make them superior to the Hyaluronic Acid fillers in some situations.

Radiesse is a product composed mainly of very fine calcium crystals. Its benefits are its increased longevity and its more compact nature which can give more definition to an injected area. It's frequently used in the nasolabial folds, the cheeks, chin and over the lower jaw as well as the temple area. It's also found acceptance as a very nice way to plump up the back of the hands in patients with thinning of the skin. It requires no skin testing and is very compatible with the tissues.

Sculptra is an interesting addition to the facial filler family. It is comprised of a form of Lactic Acid molecules suspended in saline. Originally approved to help correct the severe soft tissue thinning seen in some patients taking HIV medications, its use has expanded into the aesthetic arena. It is a great product for long-term filling of the cheeks and temples. Its main draw to date is its longevity of up to a year and a half or so. The downside has been the fact that results are not instant. The product causes collagen to be made over a longer period of time and patients need to accept the fact that improvements will be gradual rather than instantaneous.

One technique that has been around for some time - but which has improved with time - is the injection of a patient's own fat to correct the areas of concern. With this technique, fat is harvested from another area and then processed and reinjected into the appropriate areas. This technique is technically more complicated than the above injectables require. Usually the areas need to be overcorrected to account for the inevitable loss of some of the fat. There is usually more trauma to the areas treated and more bruising and post treatment swelling. The benefit of this technique is that the fat that survives in the treated areas will last for a very long time. In my own practice, I am more likely to use this technique when a patient is undergoing other surgical procedures, commonly a facelift. Nevertheless, it can be performed as a 'stand alone' procedure. One downside of this technique is that it can be difficult predicting how much fat will survive.

## THE FUTURE

It is accurate to state that the future will bring exciting new products and techniques to the Injectable arsenal. Research is quite intense in this area as scientists continue to search for the ultimate fillers. Important areas of interest include increasing the length of correction, creating compounds that are bio-compatible, easily prepared and injected with a low risk profile. A particularly exciting and promising field is that of stem cell research. This will effectively allow patients to take a small amount of their own tissue and then grow fat or collagen producing cells which can then be re-injected at a later date. All these improvements will ultimately benefit the patients seeking the improvements that injectable fillers offer.

## RECOMMENDATIONS AND A WORD TO THE WISE

We've spent some time outlining many of the Injectables available today. However, one very important topic still needs to be covered. That topic is how to choose a qualified practitioner to assess your needs and make the appropriate recommendations. Then, of course, most patients would further want an experienced injector to ensure the best results with the least amount of risk.

There is probably no other area of medicine that faces the challenges that Aesthetic Medicine does. The specialties of medicine that have traditionally been involved in Aesthetic Medicine such as Plastic Surgery, Dermatology, Facial Plastic Surgery and Ophthalmic Plastic Surgery have watched with some concern as numerous practitioners from outside these specialties have entered the arena of Aesthetic Medicine. Statistics indicate that 35% of qualified physicians have seen complications from Injections performed in non-medical settings. Remember that injectables are medical treatments that belong in the hands of qualified practitioners.

A patient's best protection is to determine that the provider is trained and experienced in the product he is injecting. Any licensed physician is legally allowed to use Injectables. However, not all doctors have the training, skill and experience to give the patient a first-class experience. Another group of Injectors includes Nurse Practitioners and Physician's Assistants. Legally, this group of practitioners functions under the supervision of a qualified and licensed physician. Many of these individuals are accomplished and well-trained. Nevertheless, problems arise when the nurse or P.A. is working outside of the supervision of a qualified physician. Just like a doctor, the nurse or P.A. should be able to readily provide evidence of appropriate education and certification specific to the Injectable he/she is using. They must provide informed consent and you should be given the option of being treated by a physician if desired.

A few remaining caveats would be to avoid treatments in non-medical settings, particularly in a private home, or a hotel. Be wary of bargain prices or steep discounts as well since the products may not be FDA approved or may not be of the accepted dosage.

Facial fillers are here to stay and they're expected to only get better with time. Patients will be reaping the rewards of newer fillers with improved characteristics as time goes by. But even today, there are a number of different fillers to choose from – options that didn't exist 10 years ago. When the preliminary homework of selecting a qualified provider is completed, most patients can expect excellent results with a minimum of downtime and a high level of safety.

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*Dr. Jon F. Harrell DO FACS is certified with the American Board of Plastic Surgery. Dr. Harrell has recently opened his new practice, Century Center for Aesthetic Medicine & Surgery here in Weston. They offer a variety of services and procedures all in an upscale, relaxing environment to help you look your best. For a free consultation, please call 954.384.9692 or visit [www.DrJonHarrell.com](http://www.DrJonHarrell.com).*