Take a cosmetic practice to the next level with facial injectables

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Minimally invasive cosmetic facial procedures are quickly becoming the most exciting and controversial topic in cosmetic dentistry. In my mind, there is no better clinician with the capabilities and qualifications to provide these procedures than the dental professional.

Over the last three to four years, we have trained hundreds of practitioners in the art of facial injectables. In doing so, we have found that dentists have the greatest inherent skills and artistic ability when compared to any other professional.

- Dentists often ask me why I think that they are qualified to do these procedures. In response, I ask them some simple questions:
  - Which medical professional injects the most patients on a daily basis?
  - Who knows the ins and outs of giving an injection like possible?
  - Who knows how to anesthetize the tissues of the face via intraoral techniques?
  - Who is in tune, on a daily basis, to facial and peri-oral anatomy and symmetry?
  - Who knows the dental and skeletal relationships on the soft tissue of the face?
  - Who knows the anatomy of a proper lip line?
  - Whom do patients trust (every six months) to continuously inject them?

The answer, of course, is you! Using facial injectables is a natural progression for the cosmetic dentist. For example, we all understand that enhancing a patient’s smile is more than just placing some laminates. In our courses, we tell clinicians to imagine the teeth as a picture and that the lips frame them.

When you look at a middle-aged woman with beautiful veneers and a thin, colorless upper lip with many smoker’s lines, it tends to dampen the cosmetic effect.

As a matter of fact, when you start planning those veneers, you should be taking into account the effect the veneers will have on lip support, as well as incisal show, both in relaxed and animated positions. Then, when you enhance her lip, you have to take into account the proper lip outline and volume, as well as incisal show.

In other words, the two procedures go hand in hand. Which medical professional could possibly understand this better than a dentist?

The first thing the practitioner needs to realize is the difference between Botulinum toxin (Botox® and Dysport®) and facial fillers (Restylane®, Perlane®, Juvederm® and Radiesse® among many others).

Botulinum toxin is a clear fluid medication that comes in a lyophilized (freeze-dried) form. It is then mixed with saline and injected subcutaneously or intramuscularly with the intention of weakening the target muscle. Contrary to popular belief, it does not “fill” lines, nor does it “smooth” wrinkles.

In order for a muscle to contract, a signal is sent down the motor nerve terminal and at its end, acetylcholine is sent across the gap to the muscle. This signals the muscle to contract. Botulinum toxin does not allow acetylcholine to cross from the motor nerve terminal to the muscle.

Technically speaking, the toxin causes a “chemical denervation” of the muscle. If the muscle cannot contract, then the overlying skin cannot wrinkle.

On the other hand, filler materials fill in a depression or wrinkle and can add volume or contour to the face. They are gel-like in consistency and come in pre-filled syringes. The most common type of filler currently being used in the United States is hyaluronic acid (Restylane®, Perlane®, Juvederm®). Hyaluronic acid is a polysaccharide complex found in normal human tissue.

Because it is not a protein, the risk of allergic reaction is extremely low. There is another filler material, Radiesse, that is made up of calcium hydroxyapatite (CaHA) microspheres suspended in a water-based gel carrier. This is similar to the hydroxyapatite found in our teeth and bones.

Another important learning aspect is which areas require botulinum toxin and which areas require filler material. Many times, a combination of both materials is required for the most aesthetic effect.

When looking at the aging face, it is important to understand the difference between static wrinkles and dynamic wrinkles. If you tell a patient to relax her facial muscles and not make any movements, and you see a wrinkle or groove at rest, this would be a static wrinkle (see nasolabial fold). By definition, botulinum toxin would do very little for these wrinkles or grooves because the toxin would “relax” the underlying muscles. However, in this patient we know that even if the muscles are relaxed, they still have this wrinkle at rest. Therefore, filler (or combination therapy) would be better.

A dynamic wrinkle is one that is caused by animation or muscle function (see forehead). In this instance, botulinum toxin would do very well. It would weaken the underlying muscle and cause a chemical denervation. In turn, this would stop the overlying skin from wrinkling.
For the beginning injector, we generally recommend starting with three areas of the face that generally receive botulinum toxin and three areas that generally receive filler material. In the botulinum toxin course we teach both Botox and Dysport and focus on the glabella complex (the frown lines between the eyes), the forehead and “crow’s feet” (smile lines around the eye).

In the filler course, we focus on the nasolabial folds (lines from the ala of the nose to the corners of the mouth), the “marionette lines” (lines from the corners of the mouth to the inferior border of the mandible) and the lips.

However, with time and experience, there is no limit to how creative the practitioner can become. In my office, we can perform a lunchtime “liquid facelift” by combining botulinum toxin and filler material in multiple areas of the face. We can accomplish this by placing the fillers via an intra-oral route, without any bruising or swelling, allowing patients to go right back to work.

Once the practitioner gains experience and confidence, there are many other exciting procedures that can be done. Instead of doing a genioplasty, you can augment the chin with filler material. You can do a liquid rhinoplasty (nose job), cheek lift or brow lift, just to name a few. How about eliminating a gummy smile, rounding off a square jaw or even augmenting an earlobe?

Another application of botulinum toxin in the dental arena is in the treatment of temporomandibular disorders (TMD). Temporomandibular disorders can span a wide variety of etiologies, including muscular, ligamentous, intra-articular or bony sources. A diagnosis relies on an extensive history, physical exam, radiologic studies and diagnostic procedures.

Botulinum toxin is just one treatment modality included in an extensive algorithm used in treating TMD. Recent studies show that botulinum toxin contains both a muscle relaxing as well as an analgesic effect.

In my opinion, the reason this has become such a controversial topic throughout the medical community is because of the encroaching competition that the other specialties are feeling in this multi-billion dollar industry.

Over the last five years, non-invasive cosmetic procedures have experienced significant growth due to their increasing popularity and virtually painless, highly profitable, office-based administration, and their ability to make patients’ faces look younger and fuller for longer periods of time. Many specialties, such as gynecologists, family practitioners and ER physicians, are offering these procedures without any backlash.

Surely, the dentist is better prepared, better trained and has more experience in the peroral and facial arena than these other specialties.

The ADA definition of dentistry is defined as “the evaluation, diagnosis, prevention and/or treatment (nonsurgical, surgical or related procedures) of diseases, disorders and/or conditions of the oral cavity, maxillofacial area and/or the adjacent and associated structures and their impact on the human body.”

Whether you are interested in providing these procedures or not, it is important to defend the skills and talents that the dentist inherently holds.

It is time to show the medical community and the rest of the world that we are truly physicians of the oral cavity and its associated structures.

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