

COMBINATION THERAPIES

Combination therapies have been the hot topic in aesthetics over the last few years as emerging techniques and technology allow us to deliver incredible results for our patients with little to no downtime.

Injectable fillers continue to be an extremely popular treatment performed in clinics around the country. Our DermaSculpt microcannula, the first one on the market, continues to be the most commonly used microcannula in the country. We have noticed that most of our practitioners are favoring the 25 gauge, 1 ½ inch microcannula for day to day hyaluronic acid (HA) filler injections, a predilection I echo as well in my practice. For thicker fillers and for PLLA / PLGA, the 22 gauge 2-inch microcannula seems to be the "go-to." We are excited that there are now two "on-label" indications for microcannula injections Restylane Silk for lip augmentation and Restylane Lyft for rejuvenation of hands. We are diligently working with Galderma's training academy (GAIN) to ensure that doctors and aesthetic injection specialists around the country are properly trained on the microcannula. We anticipate other filler companies will follow suit in the near future as the benefits of the microcannula continue to be described in scientific journals including less bruising, less pain, and less chance of intravascular injection.

Three years ago we introduced NovaThreads, the first PDO thread to be commercially available in the United States. We have improved the design of NovaThreads through research and development and are proud to have our current "Barb4" line for lifting threads. We were also pleased to see that a recent publication demonstrated the powerful collagenesis and increase in the septal fibrous network progenitors (TGF-β) showing 20x increase in collagen and TGF-β after one month, 7x after 3 months, and 2x after 7 months.

Last year we introduced ezPRF, an easy to use commercially available platelet-rich fibrin (PRF) system that is showing incredible promise. Platelet-rich fibrin (PRF) is a completely autologous substance acquired from an individual's blood. When compared

to Platelet-rich plasma, PRF is easier to obtain, more inexpensive to acquire, and has been shown in numerous studies to be superior in wound healing*.

This is due to the higher concentration of platelets compared to PRP systems, leukocytes, fibrin, and a small percentage of mesenchymal stem cells. The fibrin is important as it allows the platelets to release their growth factors slowly (over one week) instead of rapidly within a few minutes, as seen in PRP systems.

The ezPRF centrifuge is configured to proprietary angles of spinning, and special smooth ezPRF tubes are designed to delay coagulation of the PRF and is portable and easy to use. Each ezPRF kit comes with everything you need to inject PRF either as an autologous filler, apply topically after a laser treatment or microneedling, use for hair growth stimulation, or mix with injectable fillers and inject with the included DermaSculpt microcannulas. We have seen amazing results with correction of under eye circles, cheek augmentation, hair growth, and combination with fat grafting. I have found great benefits utilizing ezPRF in surgery as well - I am now routinely using ezPRF to soak cartilage grafts for augmentation rhinoplasty, under the flaps after face and neck lifting surgery, mixing with the autologous fat transfer, and topically after ablative laser resurfacing.

As our experience grows with each of these modalities, I have actually found it quite useful to combine them all together in one setting! We highlighted these combination therapies at several recent academic meeting including Los Angeles Multispecialty Cosmetic Academy (LA-MCA), Vegas Cosmetic Surgery (VCS), The Aesthetic Show (TAS), AAFPRS, AACD, and CSFPS. We are routinely using NovaThreads to lift the midface and lower third, and then simultaneously injecting HA fillers mixed with ezPRF using a DermaSculpt microcannula for periocular, cheek, and perioral injections. This has produced the most dramatic and impressive results for our patients with little to no downtime.

Kian Karimi MD, FACS

HIGHLIGHTS OF THE DAY

Top 10 Tips For More Effective And Safer Facelift

Time 7:45am
Wayne Larrabee, MD

My Top 10 Tips For The Use Of Fillers and Toxins In My Practice

Time 8:00am
Nowell Solish, MD

10 Tips To Maximize The Patient Experience With Injectable Fillers

Time 8:45am
Elizabeth Houshmand, MD

Top 10 Tips For Skin Resurfacing

Time 9:00am
Joel Cohen, MD

Top 10 Things That Helped Me Minimize Overhead In My OR

Time 9:15am
Mark Samaha, MD

Top 10 Tips For Blepharoplasty Surgery

Time 9:45am
John Burroughs, MD

Top 10 Tips For More Effective Perioral Rejuvenation

Time 10:15am
S. Randolph Waldman, MD

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REGENERATIVE MEDICINE 2018

Regenerative medicine encompasses innovative therapies that allow the body to repair or regenerate aging cells, tissues and organs. Because of its easy accessibility, skin is becoming particularly attractive for the application of novel regenerative treatments. Among these therapies, stem cells, growth factors and platelet-rich plasma (PRP) have garnered interest for their therapeutic potential in scar reduction, anti-aging effects, and treatment of alopecia. Cosmetic patients are seeking out regenerative medicine treatments, and I use these modalities alone or in combination with other established cosmetic treatments.

Platelet-Rich Plasma

Platelet-rich plasma (PRP) is also commonly used for its known ability to regenerate tissue and cells, as well as anti-inflammatory and healing properties. PRP is an autologous plasma concentrated with platelets and does not contain stem cells. In fact, it's erroneous to claim that any of the platelet products contain true stem cells. The regenerative potential of PRP can be attributed to the growth factors released from platelets which play an important role in tissue regeneration and repair. PRP is currently being used in dermatology for alopecia, skin rejuvenation and treatment of acne scars. Most of the evidence for PRP use in dermatology has been in the non-surgical treatment of hair loss and regeneration of hair follicles. It's also been

used commonly in combination with microneedling for acne/acne scarring and skin rejuvenation. I also use it in combination with fillers, ultherapy and other well-established treatment modalities to potentially enhance their efficacy.

Stem Cells

Stem cells possess the cardinal features of self-renewal and plasticity. Self-renewal refers to symmetric division generating identical daughter cells and plasticity is the ability to generate cell types other than tissue lineage from which stem cells derive. Stem cells can be categorized according to their differentiation potential.

Multipotent stem cells derived from the bone marrow, umbilical cord, adipose tissue, dermis, or hair follicle bulge have various clinical applications in dermatology. Stem cells from these sources are primarily utilized in an autologous manner, which are processed outside the body and reintroduced into the donor. Umbilical cord blood is a source of multipotent hematopoietic stem cells for which surgical intervention is not necessary since they are retrieved after umbilical cord clamping. Advantages of sourcing stem cells from umbilical cord blood includes high regenerative power comparing to that of a newborn's skin and low immunogenicity given that the newborn is immunologically immature. Stem cells have been utilized in aesthetic medicine for hair loss, and in combination with other well established

cosmetic treatments to augment their efficacy.

Another popular source for autologous stem cells is adipose tissue due to its ease of accessibility and relative abundance. Given that adipose tissue-derived stem cells (ASC) are capable of differentiating into adipocytes that help maintain volume over time, they have been used for mid face contouring, lip augmentation, facial rejuvenation, facial scarring, lipodystrophy, penile girth enhancement, and vaginal augmentation.

The skin also serves as an easily accessible and abundant autologous source of stem cells. A subtype of dermal fibroblasts has been proven to have multipotent potential. They are harvested from one area of the skin using punch biopsy, processed and reinjected into another desired area of the skin. Autologous human fibroblasts have proven to be effective for the treatment of wrinkles, rhytids, and acne scars.

Regenerative medicine has already proven to have tremendous potential in the field of cosmetic dermatology. The use of stem cells and PRP will undoubtedly increase in the future. I find the ability to offer these therapies in combination with other cosmetic treatments allows me to provide my patients with enhanced outcomes.

► **Gary Goldenberg, MD**, *Goldenberg Dermatology PC and Icahn School of Medicine at Mount Sinai Hospital*; and **Aaron Farberg, MD**, *Icahn School of Medicine at Mount Sinai Hospital, New York, NY*

TOP 10 MISTAKES THAT LEAD TO LAWSUITS

Keeping your medical practice or medical spa in compliance with the ever changing regulations is a difficult task. But, it is important and, indeed, the practitioner's responsibility to know the local, state and federal rules and regulations governing their practice.

- 1. Delegation Requirements:** The degree to which the services can be delegated to unlicensed health care providers varies and state laws regarding scope of practice and required supervision have to be considered. Practitioners who delegate tasks that are outside of the delegatee's scope of practice could face civil penalties and criminal charges in aiding and abetting the unlicensed practice of medicine.
- 2. Supervision Requirements:** Once you know what you can delegate and to whom, you must be compliant with the supervision requirements of that staff. For instance, do you need to examine the patient before delegating? Do you need to be on site or have direct staff supervision?
- 3. Training Requirements:** The lack of proper training is increasingly an issue. All licensing boards require specific training in an area before being permitted to practice.

- 4. Medical Director Rules:** The term medical director must be used with caution. A medical director is generally described as a person that performs quality assurance review for a medical facility. Acting as a medical director or lending your name as a medical director for a medical spa that you have no real involvement with is improper in most jurisdictions.
- 5. Insurance:** Because medical procedures are being performed, every practitioner must review their current medical malpractice policy and make sure they are covered for the use of all devices and staff.
- 6. Advertising Restrictions:** The line between promoting effective procedures/products and misleading advertising may be blurry but to avoid lawsuits, do not create false or unjustified expectations and do not guarantee results. And, most importantly, make sure that you receive the patient's consent before using their image for any reason.
- 7. Corporate Practice of Medicine:** When forming a relationship with a non-physician, you must be aware of the corporate practice of medicine. This legal doctrine prohibits physicians or other health care professionals from being employed by a business or

- non-healthcare professional.
- 8. Patient Charts and Other Documents:** Maintaining the appropriate documentation is necessary not only for good business practices, but when it comes to adverse outcomes, medical practices will want to have their files appropriately documented in the event that litigation transpires. All practices should have standard operating procedures and protocols in place.
- 9. Compliance with OSHA:** OSHA requirements are often overlooked. OSHA has specific regulations regarding medical practices and safety. OSHA fines can be substantial depending on the degree of the violation so knowing the OSHA guidelines is critical.
- 10. Informed Consent:** A claim of lack of informed consent usually accompanies an allegation of medical malpractice for wrongful diagnosis or treatment. This is a distinct claim in a malpractice complaint that can easily be avoided.

Allison Avila is the Assistant Managing Attorney of the National Law firm, *Gordon & Rees LLP*