Scar Treatments Evolve with Non-Traditional and Emerging Therapies



Before Tx



After 1340 ProDeep Tx



Before Tx



After CO₂RE Tx Photos courtesy of Alain Braun, M.D.



Before Tx



Three weeks after one SCAAR FX Tx the patient is able to raise her arms higher Photos courtesy of Matteo Tretti Clementoni, M.D.

vessels in short pulses, resulting in quick procedures that carry few risks. In most cases, patients see results with fewer treatments and less bruising, downtime and crusting, or other changes to the skin's surface.

Synchro VASQ, from DEKA (Calenzano, Firenze, Italy), is an innovative platform that represents a new vascular laser concept. The RightLight[™] pulsed dye lamp handpiece uses an optimized, organic fluid to eliminate superficial lesions. In addition, Synchro VASQ has been effective in improving hypertrophic scars and scarring vascular components, thanks to a high-energy laser emission pulse. DEKA's proprietary DYE pulse technology offers a wide-range of spot sizes, fluences, pulse durations and peak powers, with few pigmentary and textural complications.

Regenlite from Chromogenex, Ltd. (South Wales, U.K.), is another technological advancement in the pulsed dye laser category. Its patented laser cavity produces an exclusive short pulse with fast rise time, delivering 80% of the pulse energy in the first 150 µs. This unique 585 nm pulse shape targets the smallest of microvasculature, using subpurpuric energy to create a bio-stimulatory effect and initiate a wound healing response without creating trauma. Low treatment energies (typically 2.5 - 3.0 J/cm²) negate the need for analgesia or cooling during the procedure, leaving no visual signs of treatment. All skin types can be safely treated without concern for pigment issues. Also, the device can be used to treat acne and traumatic scars.

In addition to pulsed dye lasers, IPL-based devices are useful for treating scars. The Ellipse IPL treatment, from Ellipse A/S (Hørsholm, Denmark), directs well-controlled pulses of light into the upper skin layer. This works by attacking the vascularization of the scar. One treatment approach involves pre-treating the initial keloid elements with corticosteroid, followed by a course of short IPL emissions (2x2, 5 ms pulse with a 10 ms delay) using the system's PR+ applicator (535 - 750 nm). A typical regimen includes up to four treatments spaced four weeks apart. This approach not only reduces the redness of the scar, but also stimulates collagen reorganization, thus reducing its size.

Along with using energy-based devices to treat scars, many physicians employ non-laser, organic or non-traditional and homeopathic products for treating scars. This course of treatment can be a common first step for the patient, Dr. Moelleken explained, while energy-based systems are brought in later. For example, his usual starting regimen for treating patients with scars, "includes vitamins C and E, good nutrition, adequate sleep, no smoking and creating the right environment where peaceful healing can take place."

Among the new developments in non-traditional therapies, localized oxygen infusion has been shown to treat vascular trophic lesions and scars, especially ones that are difficult to heal. With Oxy Xtra Med from Maya Beauty Engineering (Bologna, Italy), oxygen infusion therapy is combined with the Collagen Calling[®] system (also from Maya Beauty), which stimulates the production of type III collagen and elastin; improves the quality of hyaluronic acid; and reorganizes elastic and collagen fibers.

Autologous Platelet Rich Plasma (A-PRP®), from RegenLab (Le Mont-sur-Lausanne, Switzerland), uses platelets prepared from the patient's own blood to support and accelerate hard and