



## Remove Wrinkles from the Inside Out

BY STEVEN H. DAYAN, MD, FACS

Would you be interested in erasing years of age defining wrinkles simply by undergoing a twenty-minute painless procedure? What if you could also be treated in a relaxed atmosphere while listening to music and then leave the office with only a healthy pink blush to your face? What if you could also quickly return to all social and employment activities without missing a beat? Does such technology exist? Well, maybe not entirely, but we are inching closer. For years, carbon dioxide laser resurfacing and deep chemical peels have been the favored methods for smoothing out superficial irregularities, eradicating precancerous skin lesions and relieving the face of its hard earned wrinkles.

And when performed by an experienced physician, patients can expect predictable and excellent results. However, as many know, there is a prolonged healing period. It can take many months for the inflammation to abate and even then there is still a slight (5-10%) chance of delayed and permanent



hypopigmentation (areas of pigment loss). Today's active patients are demanding procedures with comparable efficacy yet without the undesirable side effects.

Therefore, the latest buzz "Dermal remodeling" is being pioneered as a new method to stimulate collagen reformation below the skin's surface without burning the skin. The two prevailing theories are that the specifically designed lasers will skip over the outer layers of skin, penetrate deep into the dermis where it deposits its energy, and denatures proteins. This heat will then stimulate collagen proliferation resulting in a thickening of the healthy skin layers and effacement of superficial wrinkles. A second thought is that by targeting and injuring microcapillaries, the laser increases the permeability of these tiny dermal vessels prompting the release inflammatory mediators. These mediators then stimulate fibroblast to produce collagen.

Patients undergo a series of treatments performed biweekly or monthly. Those undergoing the treatments need to be

patient because improvements in the skin surface will be gradual and subtle.

Collagen formation may continue for three months following treatments, after which patients can expect a smoother and healthier

appearance to their face.

How about the downsides? The biggest draw back to the procedure is that the results may fall short of expectations. Also patients must keep in mind that

although dermal remodeling has specifically been designed to be safe, it is still a medical procedure with inherent risks. Early research described possible transient pigmentary skin changes,

blistering and small pitted marks. However, the consensus is that these issues have been worked out with current technology. Any concerns should be alleviated by seeking out an experienced physician who is familiar with the science and the equipment behind the theory.

Although this technology is still in its infancy the results have been impressive and patient satisfaction is high. Currently there are a few laser manufacturers that tout their laser's ability to perform effective dermal remodeling but there are also non-laser modalities that may be efficacious (e.g. ultrasound technology,

intense light). The ideal method to perform this treatment is still being determined. Currently in the Chicago area there is a 4-month ongoing clinical trial to evaluate the effectiveness a long pulse Yag laser to stimulate collagen formation. Preliminary results have been remarkable but long-term benefits have yet to be determined. For more information call 773 472 7559.

If you have been considering treatment for facial wrinkles but have not been satisfied with superficial facial treatments, and can not afford the downtime associated with traditional methods of resurfacing then Dermal Remodeling may be for you.



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