

PRODUCT REVIEW

SmartXide DOT Fractionated CO₂ Laser

THE LATEST BREAKTHROUGH IN SKIN RESURFACING –FRACTIONATED CO₂ LASERS

By Carolyn I. Jacob, M.D.



The gold standard for facial resurfacing since 1996 has been the standard CO₂ (carbon dioxide) laser. A great treatment for smoothing the skin, removing brown spots, and treating some types of acne scars, the CO₂ laser was popular but not without its faults. Healing took up to 14 days or more, often with crusting of the skin, itching, and discomfort. Occasionally discoloration of the skin or whitening of the skin occurred. Discomfort during treatment (sometimes requiring IV sedation) was another drawback in using the CO₂ laser. In the worst of cases, patients were left with permanent scars from over aggressive treatments.

Over the years, many lasers tried to mimic the results of the CO₂ laser, without removing the surface of the skin. The hope was to stimulate collagen production but not with the risks of discoloration, pain, or scarring. Although they required no “down time,” these non-ablative lasers failed to produce satisfactory results in the vast majority of patients. They also required multiple treatments to achieve their goal. Dissatisfied with the meager results of pure

non-ablative lasers, researchers developed fractionated lasers. These lasers have the ability to treat portions of the skin while leaving tiny untreated areas in between to allow for quick healing.

The original fractionated lasers used wavelengths that were beneficial, but still did not produce results similar to the standard CO₂ laser. Multiple, sometimes painful, treatments were required

to achieve an effect.

Several different versions of fractionated lasers became available, but none could reproduce the effects of the standard CO₂ laser.

Most recently, the SmartXide DOT Fractionated CO₂ laser was developed to allow for maximum skin improvement, with minimum downtime. Similar to “aerating a lawn,” tiny dots of skin tissue are treated within seconds to produce tightening and generate new collagen within the skin. Because of the normal skin in between the dots, the treated tissue can easily heal within 4-6 days. The healing process consists of mild sandpaper-like flaking of the skin, while the patient uses physician grade emollients to moisturize and sunblock to protect.

Patients need only topical anesthesia for full face treatments and describe the sensation during the procedure as similar to a mild sunburn. Treatment of the entire face can be done in as quickly as 20 minutes. Immediate skin tightening is seen during the procedure, and the patients have mild swelling for 1-2 days.

Most patients are back in makeup in 5-6 days, with only mild pinkness of the skin. Collagen replenishment then continues for 6-9 months.

The SmartXide DOT therapy fractionated CO₂ laser is unique in that the intensity of the treatment can be increased or decreased, depending on the patient’s need. No other fractionated CO₂ laser is

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as versatile. This versatility allows the physician to customize treatments to his or her specific needs. Brown age spots, wrinkles, fine lines, sagging eyelid skin can all be treated with the DOT therapy. Plus, nothing is better for reducing the size of pores. For further improvement, for instance of acne scars, treatments can be repeated every 6-9 months as desired. The results are dramatic, and the patients are thrilled.



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