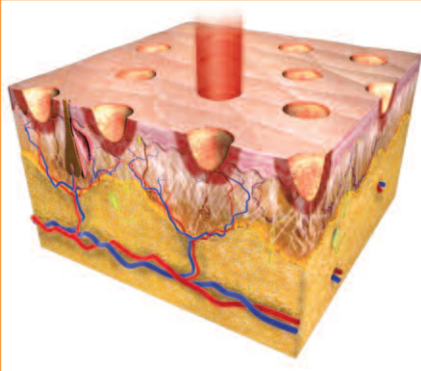


# SmartPulse Technology Facilitates Customizable DOT Therapy

By Bob Kronemyer, Associate Editor



DOT therapy (Dermal Optical Thermolysis) creates thousands of microscopic perforations, which induce immediate skin tightening and stimulate new collagen growth.

“EclipseMed’s SmartXide DOT laser allows us to individualize treatment for every patient that comes into our office.”



Hi-Scan DOT Scanner featuring Infinite Delivery Options (IDO)

Due to SmartPulse technology power settings, pulse width and spacing of fractional laser dots can all be greatly varied to distinctly tailor DOT Therapy treatments when using the SmartXide DOT CO<sub>2</sub> laser from EclipseMed, Inc. (Dallas, Texas).

“EclipseMed’s SmartXide DOT laser allows us to individualize treatment for every patient that comes into our office, depending on the severity of the problem and the amount of downtime desired,” explained Robert Gotkin, M.D., F.A.C.S., a plastic surgeon in private practice in New York City, N.Y. “Various anesthesia choices are also available – ranging from topical anesthetic and cold air to I.V. sedation.”



**Robert Gotkin, M.D., F.A.C.S.**  
Plastic Surgeon  
New York City, NY

With SmartPulse technology, power can be adjusted from 1 to 30 watts, dwell time from 0.2 to 2.0 ms and DOT spacing from 200 to 2,000 microns. “If someone has very severe photodamage, wrinkling or acne scars, you can employ the most aggressive settings available for these three parameters,” Dr. Gotkin said. “In extreme cases, downtime will be around ten days to re-epithelialize. Results are beautiful; approaching what we could achieve with previous UltraPulse technology from back in the 90s.”

Conversely, a patient presenting mild photodamage and/or solar elastosis with mild wrinkling can be treated while awake with only forced cold air. This patient requires “lower power (perhaps 20 to 25 watts), a shorter dwell time (1 to 1.5 ms or even less) and wider DOT spacing (500 to 1,000 microns),” Dr. Gotkin advised. The downtime for these

moderate settings is up to four or five days. One treatment session is sufficient for most patients, depending on how much downtime they are willing to accept. Overall, the SmartXide DOT laser “is extraordinarily utilitarian.”

“We are able to perform regional treatments, such as around the eyes or around the mouth or the neck area, without fear of causing pigment changes,” said Robert Weiss, M.D., an associate professor of dermatology at Johns Hopkins University School of Medicine (Baltimore, Md.). Practitioners can also program up to 38 different scan patterns with SmartXide DOT. Furthermore, the various shapes and pattern sizes may be adjusted as needed during treatment. “Generally, we use a 10 mm square scan when we are treating around the eyes, or a 15 mm square scan for whole cheeks. However, shapes are a matter of user preference. I tend to use more of the square shape.”



**Robert Weiss, M.D.**  
Associate Professor of Dermatology  
Johns Hopkins University  
School of Medicine  
Baltimore, MD

Dr. Weiss pointed out that the depth of ablation can vary with the SmartXide DOT by adjusting the dwell time. “A fractional peel may be performed with a much shorter dwell time, which also decreases the amount of patient discomfort, whereas a deeper ablative resurfacing can be accomplished with a longer dwell time.”

Because of the large scan size (up to 1.5 cm<sup>2</sup>) and speed of the scan, “treatments are very fast,” Dr. Weiss said. “Compared to some other fractional devices, the SmartXide DOT laser is 50% faster.”