## Skin Resurface Healing Is Faster With YSGG Laser

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KISSIMMEE, FLA. — A new 2,790-nm yttrium-scandium-gallium-garnet laser provides an option for skin resurfacing that appears to require less downtime than does resurfacing with either  $CO_2$  or er:YAG lasers

This was the finding in two studies presented at the annual meeting of the American Society for Laser Medicine and Surgery. The results suggest that each treatment session with Cutera Inc.'s Pearl system 2,790-nm YSGG laser typically requires a recovery period from erythema and swelling of 3-4 days, unlike the several weeks of healing usually necessary with CO<sub>2</sub> laser resurfacing.

A study conducted by Dr. David M. Verebelyi used the 2,790-nm YSGG laser to treat facial rhytids, dyschromia, and texture abnormalities in 19 patients aged 18-63 years with Fitzpatrick Skin types I-IV. One side of the face of each patient was randomly selected for treatment while the other side was left untreated. Dr. Verebelyi used the laser at a fluence of 3-3.5 J/cm², a pulse duration of 0.4 ms, and 20% overlap.

In Dr. Verebelyi's study and the other study, investigators performed two treatments with the laser on each patient, separated by about 4 weeks. A physician who did not know which side received treatment graded photos on a 10-point scale on which 0 equaled no improvement and 10 equaled excellent improvement.

The physician gave the treated side much higher average ratings than the un-



A patient is shown before treatment with a yttrium-scandium-gallium-garnet laser.



The patient is shown 28 days after her second treatment with the new laser.

treated side in 17 patients who completed two treatment sessions, as follows: for fine lines (6.5 vs. 0.2), erythema (3.5 vs. 0.4), skin texture (7.7 vs. 1.5), scar improvement (3.2 vs. 0.2), and overall appearance (6.9 vs. 0.7), reported Dr. Verebelyi, who is in private practice in Highlands Ranch, Colo.

Erythema and swelling lasted for a mean of 4 days (range of 3-7 days); no patients experienced any permanent side effects.

Dr. Kei Negishi of Tokyo Women's Medical University performed a separate study with the laser to treat 23 patients aged 30-74 years with Fitzpatrick skin types III or IV. Each procedure was performed at a fluence of 1.5-2 J/cm<sup>2</sup> and a pulse duration of 0.4 or 0.5 ms.

Improvement was graded as excellent or moderate by 91% of patients for skin texture and elasticity, by 52% for fine lines and elasticity, by 86% for irregular or overall pigmentation, and by 18% for mottled solar lentigos.

A total of 78% of patients rated over-

all satisfaction as excellent or moderate.

The patients had a mean downtime of 3.4 days with erythema, followed by a mean of 6.7 days of crust formation. Patients who were young or had oilier skin had a shorter period of downtime, according to Dr. Negishi.

The presenters of each of the studies reported having no conflicts of interest with Cutera, although Dr. Negishi reported borrowing the device from the company to perform her study.

