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# New Device May Offer Gentler Skin Resurfacing

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*Los Angeles Bureau*

LAS VEGAS — A novel device that transfers energy from nitrogen gas into the skin may be capable of producing improvements in skin quality and texture comparable with those produced by the carbon dioxide laser, but with a less traumatic recovery.

Ronald L. Moy, M.D., a Los Angeles–based dermatologic surgeon, reviewed early results that were produced by the Portrait PSR$^3$ system at a facial cosmetic surgery symposium sponsored by the Multi-Specialty Foundation for Facial Aesthetic Surgical Excellence.

A 40%-50% improvement in wrinkles, 10%-15% skin contraction, and significant improvement in skin texture have been demonstrated in a small number of patients who were followed for 2 years after Portrait PSR$^3$ treatments by Dr. Moy and colleagues investigating the new device.

The technology consists of a handpiece that produces nitrogen plasma, which is converted into a heated gas for delivery into the skin in millisecond pulses.

"It hits the skin but leaves the epidermis intact," said Dr. Moy, who serves on the scientific advisory panel of Rhytec Inc., the device's manufacturer.

**Nitrogen plasma is converted into a heated gas for delivery into the skin in millisecond pulses.**

DR. MOY

A popping sound can be heard as energy pulses impact the skin, but topical anesthesia and nerve blocks are adequate for patients' pain control during the 10- to 15-minute full-face procedure.

Over several days after the procedure, a zone of thermal damage develops below the skin surface, eventually stimulating new collagen formation. The epidermis develops a bronze hue and flakes away.

Variable settings can produce modest skin surface changes roughly equivalent to a "long-weekend peel" with healing complete in 3-4 days, or a deep effect that requires about 7 days of healing.

At a setting of 4 J/cm$^2$ "you really get some heat effect and much more tightening," he said. He estimated the overall improvement to be 50%-70% at the higher settings, comparable to what was possible with early $CO_2$ lasers. ■