

Cutera's Pearl Renews Skin Surface with Unique Wavelength

By Bob Kronemyer, Associate Editor



Before Tx



After Pearl Tx

Photos courtesy of Janet Turkle, M.D.

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Cutera, Inc.'s (Brisbane, Calif.) Pearl laser employs a 2790 nm wavelength comprised of yttrium scandium gallium garnet (YSGG) crystals which are particularly well suited for photo-aging, skin rejuvenation and acne scarring. Janet Turkle, M.D., a plastic surgeon from Indianapolis, Ind., finds the Pearl laser "helpful for improving texture, fine lines and pore size. Pigmentation issues also improve."



Janet Turkle, M.D.
Plastic Surgeon
Indianapolis, IN

A typical treatment regimen with Pearl includes two sessions at four week intervals. "After two treatments, patients can expect smoother texture, a decrease in age spots and amelioration of some of the lines," Dr. Turkle added.

According to Dr. Turkle, who has been using the Pearl for nearly one year, the 2790 nm wavelength provides "enough water absorption to ablate the top half of the epidermis yet retains enough energy to coagulate the bottom half of the epidermis. The laser also creates a biological dressing to prevent the oozing as seen with traditional CO₂ treatments. Patients can now maintain healthy skin and a more youthful appearance with minimal downtime."

"Redness is followed by skin peeling and most people, by day five, have returned to normal. Skin looks smooth, even, softer and has fewer lines. After receiving the Pearl treatment myself, people would look at me and say 'your skin looks great,'" Dr. Turkle conveyed.

"Not only are you getting a smoothening of the skin, but also a volumizing or thickening effect due to new collagen growth that continues even after the treatment ends," said Jaggi Rao, M.D.,

an associate clinical professor of dermatology at the University of Alberta, in Edmonton, Canada. "The 2790 wavelength has a strong affinity for water, but it is not as specific as an Erbium:YAG, for example. So you achieve both vaporization and a thermal effect. It is the thermal heating effect that causes collagen rejuvenation."



Jaggi Rao, M.D.
Associate Clinical Professor of
Dermatology at the University
of Alberta
Edmonton, Canada

Dr. Rao mostly treats acne scarring with the Pearl laser, typically in three sessions spaced four weeks apart. "After completing a series, patients with pitted acne scars should achieve about a 60% permanent decrease in their scarring, unless it is active acne," he said. Dr. Rao also uses the Pearl to treat fine lines with a similar treatment protocol. "Carefully selected patients should see at least a 60% improvement in fine lines, which should last for many years."

A topical numbing cream is recommended and applied one hour before treatment. "With the cream there is no patient discomfort," Dr. Rao noted. Patients can expect about three days of downtime with each 15 minute session and are often given a topical retinoid to maintain results.

"I tell patients the Pearl is the laser of choice for acne scarring, as well as for fine lines," said Dr. Rao, who has been using the laser since last November. Moreover, "the safety profile is very good, even with carefully selected darker skin. I have yet to encounter any complications or side effects, even with the deeper resurfacings. In fact, the laser is so safe and user-friendly that I delegate most of the procedures."