Fractional CO\textsuperscript{2} Laser Shows Promise for Neck Rejuvenation

In a small study, researchers found that it can improve neck skin laxity, rhytids, crepe-like skin and pigmentation.

ORLANDO, Fla.—Fractional CO\textsubscript{2} laser treatments are a legitimate option for neck rejuvenation, one that could provide an alternative to surgical correction, according to researchers.

Lori Brightman, M.D., of the Laser & Skin Surgery Center of New York, and her colleagues treated neck skin laxity, rhytids, crepe-like skin, and dyspigmentation in 13 patients aged 30-75 years and who had no previous laser or cosmetic procedure in the past 12 months. The patients had to refrain from using any topical treatments or cosmeceuticals during the study. Each patient underwent two treatments with a fractional CO\textsubscript{2} laser using a spot size of 15 mm and energy fluences of 50-70 J/cm\textsuperscript{2} and microthermal zones of 200 cm\textsuperscript{2}. Each treatment consisted of two passes. Prior to treatment, topical anesthesia was applied to treatment sites and patients were given the option of additionally being mildly sedated with oral percocet or vicodin and intramuscular toradol. Patients were followed up to three months after the second procedure. Three blinded physician observers evaluated patient photographs and graded improvement in rhytids, crepe-like skin, neck tightening, and pigmentation using a five-point scale (0 = 0 percent; 1 = 1-25 percent; 2 = 25-50 percent; 3 = 50-75 percent; and 4 = 75-100 percent).

All patients experienced at least a 25 percent improvement in all evaluated outcomes (rhytids, crepe-like skin, neck tightening, and pigmentation). Neck rhytids and crepe-like skin improved by a mean of 2.83 and 2.64 points, respectively, which translates into an approximately 50 percent improvement for rhytids and greater than 40 percent improvement for crepe-like skin. Importantly, Dr. Brightman said, patients experienced no scarring and no hyper- and hypopigmentation (including no delayed hypopigmentation).

Post-treatment edema, erythema, and dryness all resolved in seven to 21 days. Dr. Brightman presented findings here at the American Society for Dermatology Surgery annual meeting.

"It is our opinion that these results support the use of fractional CO\textsubscript{2} laser treatments in the neck region to create a more youthful appearance with very low risk of adverse events," the authors concluded.