

# Sciton Advances Hair Removal Technology

By Bob Kronemyer, Associate Editor

Photos courtesy of Sunil Dhawan, M.D.



Before Tx

After Tx

“Hair removal is evolving to be able to attack finer and lighter colored hair. This is the ultimate barrier we now confront.”

Combining broadband light (BBL) with the 1064 nm wavelength laser from Sciton, Inc. (Palo Alto, Calif.) resulted in improved hair reduction efficacy, according to a recent study. The company's new High Fluence scanner used with the Profile laser also improved results and shortened treatment sessions.

In a four quadrant study of hair, one quadrant was untreated, a second quadrant treated with 1064 nm, a third with BBL and a fourth with 1064 and BBL together. “We showed that if you apply one modality, it works well, and if you use two modalities, it works better,” said study



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author Michael Gold, M.D., owner of Gold Skin Care Center in Nashville, Tenn. “Instead of achieving a 40% to 50% improvement with either light source alone, we achieved a 60% to 70% improvement using both light sources. The combined therapy is as safe as expected with any hair removal system.” The study consisted

of three to four treatment sessions, at four week intervals. “We’ve been following these patients up to six months,” Dr. Gold said. Final results will be presented in February at the annual meeting of the *American Academy of Dermatology* (AAD) in Washington, D.C.

Sciton's new High Fluence scanner is used by Sunil Dhawan, M.D., a clinical assistant professor of dermatology at Stanford University with a private practice in Fremont, Calif. “Hair removal treatment is now faster and we can treat at higher fluences,” he said. “We seem to be achieving better results. The new scanner treats an area of about 4 x 4 cm, with fluences as high as 160 J/cm<sup>2</sup>; however, I have treated only up to 120 J/cm<sup>2</sup>. There is probably 15% to 20% more hair loss with the new scanner.” Furthermore, “two legs that used to take two hours, now take about 75 minutes.”

Dr. Dhawan achieves about a 70% to 80% reduction in coarse hairs after five or six sessions. “Hair removal has evolved to either larger spot sizes or faster scanners, and pulse widths have become shorter,” he said. “The pulse widths have dropped from 20 ms to as short as 5 ms. But the lighter and finer hairs are always more of a problem. The shorter pulse widths and higher

fluence, available with the High Fluence scanner, allows us to attack the finer hairs better than before.”

A need to treat large areas of hair has resulted in two technological approaches: wide-field beams for the simultaneous treatment of multiple hairs, and the use of small beams for non-sequential treatment of hairs with fast robotic scanners. The robotic approach also allows non-selective bulk cooling of skin for several seconds during a scan for increased comfort, compared to the short duration surface cooling used with wide-field beams.



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“Hair removal is evolving to be able to attack finer and lighter colored hair. This is the ultimate barrier we now confront,” Dr. Dhawan said. “Meanwhile, we try to do as much as we can with shorter pulse width and higher fluence. Sciton's technology has been very good. It is probably one of the best we've had. Customer service has also been good.”