

# MedLite C6 Laser

## Effectively Removes Dark Vellus Hair

By Bob Kronemyer, Associate Editor



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HOYA ConBio's (Fremont, Calif.) MedLite C6 laser uses an electro-optic (EO) Q-switch to produce nanosecond pulse widths at peak energy and also targets the hair follicle with a photoacoustic effect. The 1064 nm wavelength of the Nd:YAG laser is ideal for hair removal in all skin types and penetrates deep enough to damage the hair bulb. There is very little risk of hyperpigmentation, hypopigmentation or other side effects commonly encountered on dark skin with other lasers.

According to Iltefat Hamzavi, M.D., a dermatologist in private practice in Port Huron, Mich., "The MedLite C6 is really good at removing fine black hairs in ethnic populations, such as South Asians and people of Mediterranean extractions (skin types IV and V)." Prolonged hair reduction is often achieved with three to six sessions, spaced four to six weeks apart. "There is usually a significant reduction of hair and a decreased need for home based hair removal such as shaving, waxing and plucking," Dr. Hamzavi noted. "By the time patients have completed these laser treatments, they only need to pluck or wax every three to six months."

Furthermore, the MedLite C6 laser significantly reduces the risk of skin blisters or burns because the hair removal action is photoacoustic rather than photothermal. "Treatment is less traumatic and less painful than traditional longer pulse duration lasers," said Dr. Hamzavi, a senior staff physician at Henry Ford Hospital in Detroit, Mich. The flat top beam profile of the MedLite C6 also delivers high energy evenly over the skin's surface, which significantly minimizes epidermal injury. "There is a lot less downtime with this laser and I have had no episodes of dyspigmentation," Dr. Hamzavi stated.

Dr. Hamzavi also does some facial toning with the MedLite C6 laser and treats dyschromia from acne scarring. "The laser truly helps with post-inflammatory

hyperpigmentation that people get after acne, especially among ethnic populations," he said. "Vascular, epidermal and dermal lesions can also be treated." In addition, the energy levels "match the actual output of the spot sizes," Dr. Hamzavi continued. "For instance, you can use a 6 mm spot fairly easily for hair removal. We have also treated several cases of paradoxical hypertrichosis with this laser."

"Because vellus hair has always been difficult to treat with any modality, anything which allows us to increase the potential outcome has always been exciting," said Jerome Garden, M.D., a dermatologist in private practice in Chicago, Ill. "The MedLite C6 system has shown encouraging results for the treatment of dark vellus hairs. We generally schedule four to six sessions at three to four week intervals. Patients can expect a reduction in vellus growth and a thinning of the hairs themselves."

Dr. Garden, a professor of clinical dermatology and biomedical engineering at Northwestern University in Chicago, believes the MedLite C6 is more effective than other lasers in removing vellus hairs because the Q-switched system "is on for a very short pulse duration. Therefore, you achieve high peak power and subsequently heighten the photoacoustic effect." An ongoing, large prospective study is underway to confirm early observations of treating vellus hairs with the MedLite C6.

The recently introduced RevLite laser from HOYA ConBio features a PhotoAcoustic Technology Pulse (PTP), designed to generate a unique pulse pattern, Dr. Garden explained. The dispersion of energy produces extremely narrow pulse widths with up to 60% more power, even with larger spot sizes (up to 8 mm). "Treatment should be more effective because the pulse pattern may have an additive effect," Dr. Garden said.