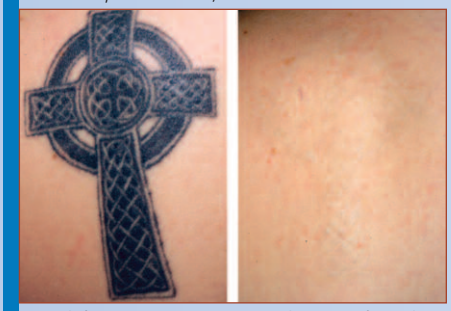
Tattoo Removal Treatment
Progresses with MedLite C6

By Amy Kamin, Contributing Editor

Photos courtesy of Suzanne Kilmer, M.D.



Tattoo before Tx

Tattoo three years after 14th MedLite C6 Tx

"This latest high-power, superior spot size beam has less tissue splatter, less interruption to the epidermis and is effective in removing tattoos."

HOYA ConBio's (Fremont, Calif.) C6 is the latest development in a line of the breakthrough Q-switched Nd:YAG MedLite lasers – known worldwide as the gold standard for tattoo removal. Harnessing the power of PhotoAcoustic energy, the MedLite C6 vibrates the target molecule, shattering the tattoo ink into tiny particles which are gradually removed by the body's natural process. Unlike lasers based on photothermal energy, the MedLite's PhotoAcoustic engineering disperses peak energy through the epidermis faster than the normal relaxation time of healthy tissue, limiting the healthy tissue's exposure to thermal build-up and offering safe, effective treatments.

The proliferation of the tattoo industry poses several challenges for physicians who are asked to remove tattoos. "There's no regulation regarding tattooing so you don't know what you are going up against," explained Eric Bernstein, M.D., medical director of the Main Line Center for Laser Surgery in Bryn Mawr, Pa., and author of numerous clinical studies on laser tattoo removal.

Eric Bernstein, M.D.
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According to Dr. Bernstein, it takes approximately 4 to 12 treatment sessions to remove a dark tattoo with the MedLite C6, an improvement over protocols in the past. "I always start with the largest spot size which I believe delivers a reasonable fluence. The high energy available with the C6 allows me to use a 4 mm or even 6 mm spot in some patients. In addition, the long 1064 nm wavelength avoids the melanin while still being strongly absorbed by the black ink," he noted.

One wavelength isn't capable of removing all tattoo colors, therefore, the choice of laser is important. The MedLite C6 offers four different wavelengths in one system to target the widest-range of multi-colored tattoos, including dark blue or black, red, green and sky blue.

According to Suzanne Kilmer, M.D., director of Laser and Skin Surgery Center of Northern California (Sacramento, Calif.), the MedLite C6 has the highest energy output available in the market so she is able to deliver a uniform fluence to greater depth. "This latest high-power, superior spot size beam has less tissue splatter, less interruption to the epidermis and is effective in removing tattoos," reported Dr. Kilmer, a pioneer in laser research who conducted the original studies on MedLite and tattoo removal. "When I use the C6 for black ink, I use the 1064 nm wavelength with the largest spot size – usually 6 mm to 8 mm – at a fluence that gives me a brisk whitening without any epidermal disruption or pinpoint bleeding. Although rare, with this laser there is less risk of textural hypopigmenation or hyperpigmentation."

Suzanne Kilmer, M.D.
Director
Laser and Skin Surgery Center
of Northern California
Sacramento, CA

Dr. Kilmer often starts the first few treatments at 8 mm then, depending on how well the ink absorbs, lowers the energy and uses a larger spot size for remaining ink, enhancing depth penetration. For red ink, she frequently doubles the 532 nm green and recommends that the fluence be kept to the level of whitening, instead of frank bleeding.

For the contemporary medical practice, MedLite C6 is an extremely versatile laser choice, offering aesthetic procedures beyond tattoo removal, including treatment of wrinkles, acne scars, pigmented and vascular lesions and hair removal.

HOYA ConBio's reputation for innovation continues with the RevLite, a next generation technology built on the same foundation as the MedLite. The RevLite utilizes a unique pulse dispersion called PhotoAcoustic Technology Pulse (PTP). In addition to tattoo removal and other indications standard for Q-switched Nd:YAG engineering, PTP is achieving excellent clinical results in collagen rebuilding and non-ablative skin resurfacing, with minimal patient discomfort.