AlexTriVantage Features Multiple Wavelengths for Tattoo Removal

By Bob Kronemyer, Associate Editor

Jeannie Tsai, M.D.
Presidio Laser Medicine, Inc.
San Francisco, CA

Before Tx

Eight weeks after third AlexTriVantage Tx

Photos courtesy of Jeannie Tsai, M.D.

Eric Bernstein, M.D.
Clinical Associate Professor
Department of Dermatology
University of Pennsylvania
Bryn Mawr, PA

By simply attaching a handpiece onto the fiber optic delivery system of the AlexTriVantage laser from Candela (Wayland, Mass.), physicians can effortlessly change wavelengths to remove tattoos on darker skinned patients. In addition to Q-switched and long pulse alexandrite, this laser provides 1064 nm and 532 nm Nd:YAG wavelengths via a set of innovative Laser-Pumped-Laser handpieces.

"It's nice to have three different wavelengths in one box and be able to treat all the different colors of tattoos," said Jeannie Tsai, M.D., the owner of Presidio Laser Medicine, Inc., a cosmetic medical practice in San Francisco, Calif.

For removing tattoos from darker skin types IV, V and VI, Dr. Tsai starts with the 1064 nm wavelength. "I treat conservatively until I achieve a good clinical response." For patients with skin type IV, Dr. Tsai will perform a test spot with the 755 nm wavelength at a very low setting. "I will not use the 755 nm on patients with skin types V and VI. I tend not to use the 532 nm wavelength on darker skin."

Depending on whether the tattoo has been professionally applied, the depth and quantity of pigment, along with other factors, patients typically schedule between five and ten treatments, at eight week intervals.

"We have achieved good clearance for several tattoos after only a few treatments. After a full series, I would expect clearance that is comparable to other 1064/532 wavelength systems," Dr. Tsai reported. "It is certainly more convenient to have one laser with three wavelengths instead of two separate lasers, which also saves valuable floor space."

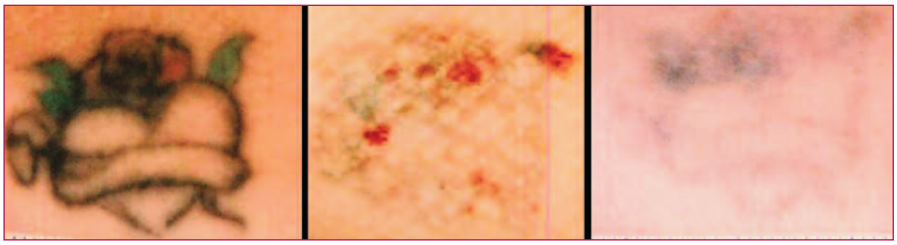
Furthermore, AlexTriVantage's fiber optic delivery system – used instead of an articulated arm, "is more reliable and tends to stay in alignment," Dr. Tsai noted.

According to Eric Bernstein, M.D., director of the Laser Surgery and Cosmetic Dermatology Centers, Inc., in Bryn Mawr, Penn., "The AlexTriVantage laser is a real engineering feat. This is the first time we've had a handpiece in which the treatment being pumped is the second laser (Laser-Pumped-Laser handpieces for 1064 nm and 532 nm)."

Dr. Bernstein also starts treatment with the 1064 nm handpiece. "This spares the melanin and treats the tattoo at the same time. With the old alexandrite laser, you didn't have the option to do that." For most multicolored tattoos, "the 1064 wavelength often does not take out the green and it certainly won't remove red. So having another wavelength is very helpful." In many cases, that second wavelength is 755 nm, but for red pigment, Dr. Bernstein uses 532 nm. He also feels a second wavelength is beneficial for tattoos that become resistant to the 1064 wavelength in darker skinned patients.

Dr. Bernstein generally treats in six week intervals, with the number of sessions ranging from four for an amateur tattoo, to 12 or more for a professional tattoo. "Having multiple wavelengths is an advantage for both color and black and white tattoos. The flexible fiber delivery system should also result in fewer issues with maintenance."

In addition to tattoo removal, AlexTriVantage is indicated for treating benign pigmented lesions, such as age spots, sun spots, nevi and freckles.



Tattoo before Tx | Tattoo immediately after AlexTriVantage Tx | Tattoo after four AlexTriVantage treatments

Photos courtesy of Eric Bernstein, M.D.