

Elite MPX Allows Laser Hair Removal in Darker Skin Types

By Kevin A. Wilson, Contributing Editor



Jay M. Kulkin, M.D.
Owner
Women's Institute for Health
Atlanta, GA



Eliot F. Battle, M.D.
President
Cultura Dermatology & Laser Center
Washington, DC



Cheek before Tx



Cheek after Elite MPX and microdermabrasion treatments
Photos courtesy of Jay M. Kulkin, M.D.

According to the *American Society for Aesthetic Plastic Surgery*, in 2010 laser hair removal was the third most commonly performed non-surgical cosmetic procedure in the U.S.¹ When considering the diverse population of the global aesthetic marketplace, the safe and successful treatment of patients with darker skin types is of increasing importance.

For Jay M. Kulkin, M.D., owner of the Women's Institute for Health in Atlanta, Ga., Elite MPX from Cynosure (Westford, Mass.), is safe and effective for darker skin types. This dual wavelength aesthetic workstation combines the clinically proven wavelengths of 1064 nm Nd:YAG and 755 nm alexandrite using proprietary MultiPlex sequencing technology, allowing the user to select among various fluences, pulse widths, combinations and sequences of wavelength delivery.

"The Nd:YAG is FDA cleared for the permanent reduction of unwanted hair in all skin types," said Dr. Kulkin. "However, it's less effective in lighter skin types with finer hair, or lower melanin content, which the alexandrite laser helps address." MultiPlex allows physicians to choose how the wavelengths are blended and which is delivered first.

Eliot F. Battle, M.D., president of Cultura Dermatology & Laser Center (Washington, D.C.) feels, "the versatility of Elite MPX has been a wonderful addition to my array of lasers. The ability to use either the alexandrite or the Nd:YAG allows me to treat the full spectrum of skin colors regardless of ethnicity. Coupling a low fluence pulse of the alexandrite with the Nd:YAG greatly improves my ability to treat finer hair on skin of color, including skin type VI patients. We also use the Elite MPX in microsecond mode to reduce pore size, acne scars and dermis pigmentation."

"Patients of color are the largest growing population in aesthetic medicine; with the tools we now have, more practices and centers should be focusing on treating this population," Dr. Battle added. Elite MPX is also used for indications such as aging skin and unwanted vascularity.

With the increasing prominence of multiracial patients, flexible treatment is even more essential, Dr. Kulkin pointed out. Cynosure has refined the protocol to help physicians take full advantage of the device's capabilities. "My rule for skin types up to V, is to treat with no more than 60 joules (J) of heat and no faster pulse width than 10 ms. For darker skinned patients we might start at 40 to 45 J and maybe 15 or 20 ms, working toward the maximum without hurting the patient."

When calculating the delivered heat energy, one multiplies the delivered joules of alexandrite laser by three, adding them to the joules of Nd:YAG to get a result less than 60. "For 10 J of alexandrite, possibly at 30 to 40 ms, that's 30 J of heat. We might supplement that with 20 J of the Nd:YAG for a total of 50, later moving upward not to exceed 60 total heat joules and rarely exceed the 15 J threshold with the alexandrite laser. Thus we avoid complications," Dr. Kulkin continued.

Another key is air cooling. "Contact cooling simply does not cool the skin properly before and after the pulse. Air cooling delivers lower temperatures, which is much more protective," stated Dr. Kulkin. "Complications, especially post-inflammatory hyperpigmentation, are unbelievably aggravating to the patient. We avoid them at all costs, and that's why our hair removal practice is so successful."

Reference:

1. <http://www.surgery.org/sites/default/files/2010-top5.pdf>