Treatment of Solar Lentigines with the CoolGlide Xeo Optimized Pulse Spectrum Pulsed Light Device: Preliminary Results

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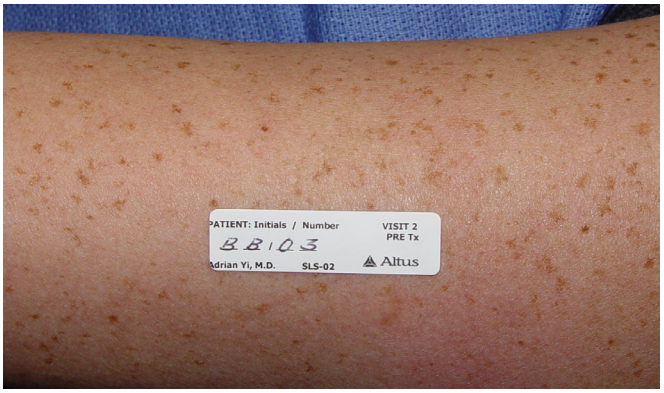
Initial findings of a study currently in progress

The CoolGlide Xeo is a dual output device consisting of a versatile 1064 nm laser system and a pulsed light source optimized for the treatment of superficial pigmented lesions such as solar lentigines. The objective of this two-site study is to evaluate the safety and efficacy of the pulsed light portion of the Cutera CoolGlide Xeo system for the treatment of solar lentigines. The device emits a range of wavelengths from 600 nm to 850 nm. The spot size is 10 mm by 30 mm, and the fluence is adjustable up to 20 J/cm^2.

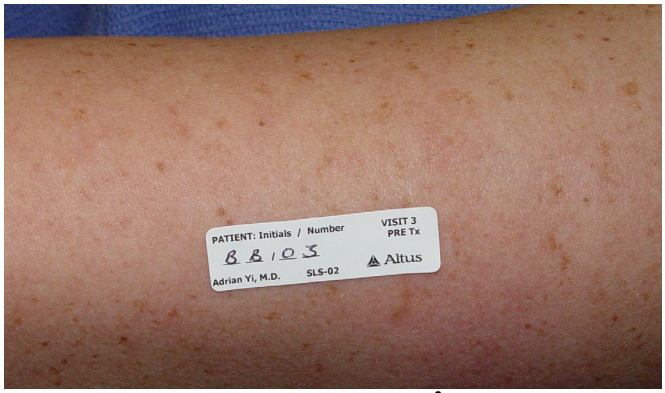
Approximately 20 subjects of skin types I-IV will receive two treatments on an area of solar lentigines with the above-described device, followed by a final evaluation four weeks after the second treatment. At this time, one site has completed all treatments on 10 subjects with the final follow-up visit yet to occur. The other site is still in the process of enrollment and initial treatments. Prior to the treatments, any make-up is removed and the area is shaved if necessary. No gel is used for the treatments and the temperature-controlled handpiece window is held in contact with the skin.

Initial treatments typically start with test pulses and an evaluation of the site after 20 minutes. The desired response after 20 minutes is darkening of the lentigines, and possibly localized erythema around the lentigines, but not general erythema over the entire area. The fluence is adjusted as necessary based on the results of the test spots and the full treatment is then completed.

Of the initial subjects that have returned for their first follow-up evaluation and re-treatment, none has had unwanted side effects. The typical response is that the lentigines initially darken and then form small areas of crusting, which resolve in approximately 2 weeks. It has also been found that effective treatments can be achieved with fluences that are much lower than reported for other pulsed light devices. We believe that this is primarily due to the reduced wavelength range of this device, consisting of those wavelengths optimized for treatment of superficial pigmented lesions. Results for one of the subjects after one treatment are shown below.



Woman's arm before treatment



3 weeks after 1 treatment at 12 J/cm^2

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