

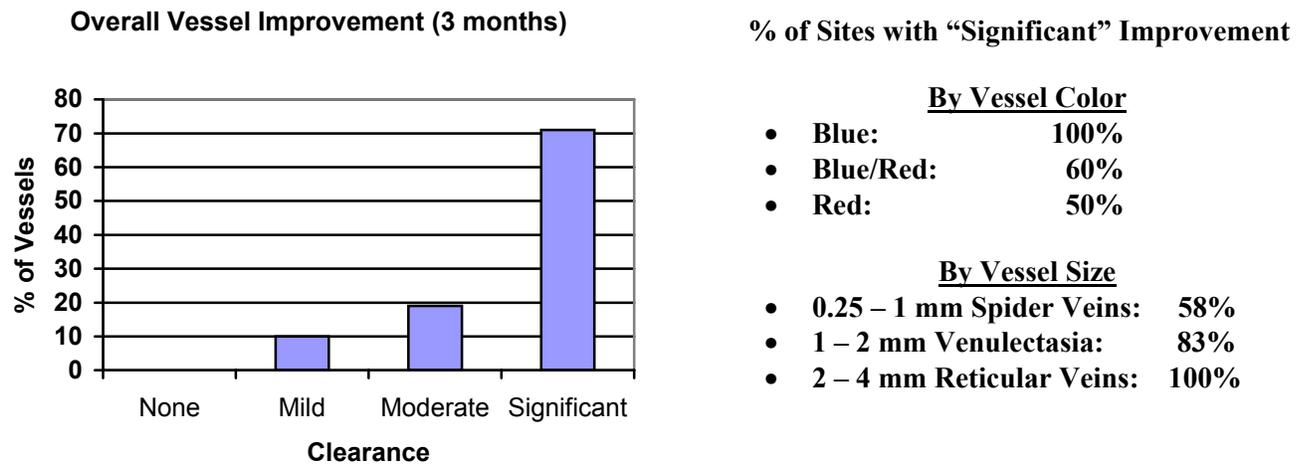
1064 nm Nd:YAG CoolGlide[®] Excel Laser Irradiation for Lower Extremity Telangiectasias & Small Reticular Veins: Efficacy as Measured by Vessel Color and Size

Arlene S. Rogachefsky, M.D., Sirunya Silapunt, M.D., David J. Goldberg, M.D.
Skin Laser & Surgery Specialists of NY/NJ, Mount Sinai School of Medicine, New York, NY

Summary of data presented by Arlene Rogachefsky, M.D. at the American Society for Laser Medicine and Surgery Twenty-First Annual Meeting in New Orleans, Louisiana, April 2001.

The objective of this study was to evaluate the safety and efficacy of the Cutera CoolGlide Excel laser system for the treatment of lower extremity telangiectasia and small reticular veins. The laser has a wavelength of 1064 nm and user adjustable spot size, pulse width and fluence settings, which were adjusted based on vessel size, color and depth. The range of pulse durations used were from 10 to 50 ms. The range of fluences used were from 90 to 187 J/cm². The majority of treatments were performed using the 7 mm spot size, although some treatments were performed with the 5 mm and 10 mm spot size diameters. The contact-cooling feature of the handpiece was used to pre-cool and post-cool the epidermis.

Twenty-one sites on fifteen female subjects of Fitzpatrick skin type I-IV received one (3 sites) or two (18 sites) treatments with evaluation continuing for 3 months after the last treatment. The age range was 22 to 69 years (mean of 54 years). Clearance was evaluated at 3 months after the last treatment by assigning a grade of none (no improvement), mild, moderate, or significant (most improvement) clearance. The overall results indicate that 71% of all sites showed significant improvement. All vessel sizes (0.25 to 4 mm) and all vessel colors were successfully treated.



The most common immediate responses to the laser treatment included blanching (85%), erythema (82%), edema (21%) and darkening of the vessel (18%). Less frequently seen immediate reactions were purpura (8%) edematous papules (8%), vessel shrinkage (5%) and a popping sound (3%). Blistering and whitening were not observed.

At the 3 month evaluation, mild or moderate post-inflammatory hyperpigmentation was seen in 62% of the sites. There was no hypopigmentation, purpura, telangiectatic matting or scarring observed.