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Marguerite Germain, M.D. and Staff

Treating Leg Veins with the GentleYAG® Laser 3 mm Spot

Marguerite Germain, M.D.
Germain Dermatology
Mt. Pleasant, South Carolina

Introduction

Multiple lasers have demonstrated efficacy to varying degrees in treating leg veins. The advantages of using lasers to remove unwanted telangiectasias include the speed and non-invasive nature of treatment, as well as the size and depth of vessels that can be treated with laser therapy versus sclerotherapy.

Still, no matter what treatment modality is chosen, eliminating spider veins remains a challenging procedure for most practitioners. The reason for the challenge is that the exact cause of these smaller, more superficial, yet unsightly and unwanted veins is not known. Heredity is one component. Other possible factors include hormonal changes associated with puberty, pregnancy, and menopause; constrictive clothing; use of birth control pills; and excessive sun exposure. Even after the annoying blood vessels are eliminated, revascularization often occurs and new leg veins reappear.

As such, expectations should be set appropriately with patients, regardless of the modality chosen to treat the leg veins.

This paper reports on our success using the GentleYAG Nd:YAG laser from Candela and its 3 mm spot size for the treatment of lower-leg telangiectasias.

Method

The subject of this study was a 48-year-old female with Type II skin. She was treated using a 1064 nm laser and a 3 mm spot at the following treatment parameters: 240 J/cm^2, 60 ms, 15/20/10. After the laser treatment, cooling compresses were applied to the treated area.

Results

Before-and-after photography demonstrates the efficacy of using a 1064 nm wavelength laser on the vessels in question immediately after treatment and after four months. Only one treatment was done on this patient, which was well tolerated with excellent clearance observed.

Discussion

At Germain Dermatology, we originally purchased the GentleYAG laser to complement our GentleLASE® hair removal laser for treating darker skin types and tanned skin. Our evaluation of GentleYAG hair removal capabilities is similar to how we feel about GentleLASE hair removal—there is no faster, more powerful, or more effective (Nd:YAG) laser for hair removal on the market today. We are very pleased with GentleYAG hair removal capabilities and even more impressed with its leg vein treatment capacities.

with DCD

GentleYAG®

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The GentleYAG's 3 mm spot size, extended pulse durations, and unmatched fluences allow us to treat leg veins quickly with good visibility and minimal discomfort to our patients. The speed, ease of use, and relative comfort of GentleYAG vascular treatments can, in large part, be attributed to the Dynamic Cooling Device™ (DCD™) found on all Candela lasers. DCD sprays a cooling burst of cryogen spray before each and every laser pulse, which allows for complete visualization of the target vessel during treatment. This also enables the laser operator to literally trace the leg vein with laser energy. Often the vessel often quickly disappears before the operator's eyes.

Historically, intense pulse lasers (IPLs) have been shown not only to be ineffective for treating leg veins, but also downright dangerous. The IPL's inability to specifically target hemoglobin while protecting the surrounding tissue has proven impossible due to the nonselective nature of IPL energy. Similarly, the KTP (532 nm) laser, while effective for treating leg veins, is limited to lighter skin types only, as its melanin absorption is just too great to provide adequate protection to the epidermis.

No matter what your frame of reference is relative to other treatment technologies—speed, patient comfort, cost-effectiveness, treatment efficacy, or versatility—the GentleYAG stands head and shoulders above the rest. At least that is our opinion at Germain Dermatology.

Figure 1. **Pretreatment.**

Figure 2. **Immediately post-treatment.**

Figure 3. **Four months' post-treatment.**

Candela Corporation
530 Boston Post Road
Wayland, MA 01778 USA
Phone: (508) 358-7637
Fax: (508) 358-5569
Toll-Free: (800) 821-2013
www.candelalaser.com

Treatment parameters are subject to change—please consult your sales representative or clinical consultant, or visit www.mycandela.com to obtain current information regarding the use of your Candela device.

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