

# Venous Lake Treatments Using the Cutera CoolGlide Excel Long-Pulse 1064 nm Laser

Marla McClaren, MD, Vera A. Chotzen, MD, Suzanne L. Kilmer, MD  
*Laser & Skin Surgery Center of Northern California, Sacramento, CA*

---

*Summary of data presented by Marla McClaren, M.D. at the American Society for Laser Medicine and Surgery Twenty-Second Annual Meeting in Atlanta, Georgia, April 2002.*

## Introduction

Venous lakes are violaceous vascular papules that typically occur on the lips and ears of adults, and occasionally on other locations. Histology demonstrates dilated, blood-filled vascular channels. Treatment options have included excision, electrocautery, argon laser, flash lamp pulsed dye laser and intense pulsed light. The purpose of this study is to investigate the efficacy and side effects of the long-pulse 1064 nm laser in treating venous lakes.

## Methods

Fifteen patients with venous lakes on the lips, scalp and chest were treated with the long-pulse 1064 nm laser (CoolGlide Excel, Cutera, Brisbane, CA). The laser was used at a fluence of 60 to 100 J/cm<sup>2</sup>, a spot size of 10 mm, and a pulse duration of 60 to 80 ms. Most patients were treated with one pulse, with one patient receiving as many as four pulses. The most common treatment consisted of one pulse applied with a fluence of 80 J/cm<sup>2</sup>, a pulse duration of 60 ms, and a spot size of 10 mm.

## Results

At 1 to 6 months post treatment, all 15 patients had 100% clearance of their venous lake. 14 patients required only one treatment session and one patient required two treatment sessions. Side effects included swelling and superficial ulceration. 6/15 complained of swelling for one to two days and 1/15 (the patient treated with 4 pulses at the highest fluence) did have significant swelling and blistering but healed without complication. All patients healed without scarring and 14/15 patients healed without pigmentary changes. One patient, treated on the chest, healed with slight pigmentary change (photo on lower right).

## Conclusions

In conclusion, we believe that the 1064 nm long pulse laser is an effective and safe treatment option for venous lakes and may be an excellent option for other vascular lesions including those in the blue/purple color range.



**Venous lake on lip (above) & chest (below). Pre-op (left), immediate post-op (center), and 1-6 month post-op (right).**