

SUCCESSFUL TREATMENT OF FACIAL SPIDER VEINS WITH A LONG PULSED 940 NM DIODE LASER

Albert J. Nemeth

*Advanced Specialized Laser Center, Clearwater, FL and Dept. of Dermatology and Cutaneous Surgery,
University of South Florida, Tampa, FL*

Objectives:

To evaluate the efficacy of a long pulse 940 nm diode laser (Dornier MedTech, Wessling, Germany) to effectively treat facial spider veins.

Patients/ Methods:

Two Hundred Fifty patients (67 male; 183 female) with Fitzpatrick Skin Types I - III underwent 940 nm laser facial spider vein treatment. Because their response to therapy differs, these were further classified into facial telangiectasias (Rosacea, UV damage, genetic etiologies) and high-pressure vascular ectasias (HPVE). HPVE are found on the chin and cheeks, but are commonly located on the alar grooves, overlying the cartilaginous portion of the nose, and infranasally. The 940 nm diode laser was used with a 0.5 mm spot size, fluences of 509 - 1019 J/cm², and a pulse duration of 20 ms. Zimmer rapid air-cooling was used to provide patient comfort during treatment as well as to provide epidermal protection. Anesthetic cream provided additional patient comfort. Treatments were performed at 2-month intervals. The mean patient follow-up period was 20 months. Results were assessed clinically and documented photographically.

Results:

The 940 nm laser closed all vessels with *non-purpuric* erasure. All facial telangiectasias, irrespective of etiology, achieved > 95 % clearing in a single treatment. All HPVE were >75 % cleared in a single treatment. There were no instances of infection or scarring.

Conclusion:

The 940 nm diode laser with Zimmer rapid air-cooling was very efficacious in treating facial spider veins irrespective of etiology with excellent cosmetic results.