



## Research Presented at the American College of Phlebology

Ted King, MD, Assistant Medical Director, Vein Clinics of America, recently presented the following study at the 20<sup>th</sup> Annual Congress of the American College of Phlebology. This study was selected as part of the most recent and significant advancements in the treatment of varicose vein disease.

### **ENDOVENOUS LASER ABLATION: DOES FLUENCE MAKE A DIFFERENCE?**

**Objective:** To evaluate the possible effect and predictive value of fluence ( $J/cm^2$ ) on the success of treatment with endovenous laser ablation.

**Methods:** Four hundred thirty-five successive cases of endovenous laser ablation (980 nm diode laser and 1320 nm Yag laser) of the GSV, SSV and other non-saphenous veins were evaluated for success of treatment at 1, 3, 6, and 12 months. Any reflux ( $> 0.5$  sec.) at the SPJ or SFJ, seen on Duplex ultrasound and pulsed color Doppler imaging, was called treatment failure. Fluence was determined by dividing the energy delivered to the vein by a calculated estimate of the surface area of the treated segment of vein.

**Results:** 195 cases treated with the 1320 Yag laser and 240 cases treated with the 980 diode laser were evaluated. 21 of the cases treated with the 1320 and 20 of the cases treated with the 980 laser were called failures.

	Average J/cm	Average $J/cm^2$	Average CEAP	Average VDS
<b>980</b>				
Success	55.0	35.5	4.0	9.2
Failure	57.9	23.2	4.2	10.4
<b>1320</b>				
Success	66.9	45.4	3.9	9.7
Failure	64.9	38.1	4.2	11.4

**Conclusions:** Energy delivery ( $J/cm$ ) would not appear to be as reliable a predictor of adequate endovenous laser treatment as fluence ( $J/cm^2$ ). This is true for both the 980 diode laser and the 1320 Yag laser. Although important factors to assess, CEAP and VDS do not appear to be reliable predictors of treatment outcome either.

We hope you have found this information useful. For additional information please contact us at the number listed above.