

Treatment of Facial Veins with excel®V

International Vein Clinics
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Case Study
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Introduction

The excel V laser is a versatile treatment system that combines two laser wavelengths (532 nm /1064 nm) in one device. Both wavelengths have over a decade of evidence in the literature for the treatment of superficial and deep vascular lesions of the face and legs.^{1,2}

The 532 nm wavelength specializes in targeting red vasculature and pigmentation. The 1064 nm wavelength is indicated for the coagulation and hemostasis of benign vascular and cutaneous lesions, including benign vascular lesions. Combined, these wavelengths provide the flexibility to treat more than 20 different indications on all skin types, from superficial and deep vascular conditions to benign pigmented lesions, scarring and revitalization with a single platform.

The excel V features an adjustable sapphire contact cooling integrated into its CoolView handpiece. During the laser treatment, the sapphire window reduces the temperature rise in the epidermis, providing a high safety margin and a more comfortable treatment for the patient.

A Case Study of Facial Veins

The patient, a 68-year-old male, Fitzpatrick II skin type (fair, usually burns, sometimes tans), was initially referred to a plastic surgeon by his primary care physician and was subsequently referred to the Southern Connecticut Vascular Center for laser treatment. He presented with a cluster of facial veins, which he had for over 30 years. He decided to seek treatment after the veins started bleeding over a several month period when he was shaving.

The patient was treated for red and purple facial veins, as well as for facial matting rosacea with the excel V laser settings presented in Table 1. During treatments 1 and 2, the patient received a combination of parameters beginning with the 1064 nm for the larger purple veins at the center of the cluster then moving outward with the 532 nm wavelength. For the last treatment, the patient was treated solely with the 532 nm wavelength for the remaining fine red veins.

Table 1. Treatment Settings

Visit #	Treatment #	Wavelength (nm)	Spot Size (mm)	Pulse Duration (ms)	Fluence (J/cm ²)	Cooling (°C)
1	purple veins	1064	5	25	115	5
	red veins	532	5	8	9	5
	rosacea	532	10	11	7.8	5
2	purple veins	1064	5	25	120	5
	red veins	532	5	12	9	5
	rosacea	532	10	12	8	5
3	red veins	532	5	12	9	5



Figure 1. Before and after photos of red and purple facial vein treatment with excel V laser. Before (left), 3 weeks after 1 treatment (middle), and 2 weeks after 3 treatments (right).

Conclusions

The excel V treatment safely and effectively reduced the size and vascularity of red and purple facial veins. The patient is extremely satisfied with the results and resolution of bleeding during shaving.

¹ Trelles MA, Weiss R, Moreno-Moragas J, Romero C, Velez M, Alvarez X. Treatment of leg veins with combined pulsed dye and Nd:YAG lasers: 60 patients assessed at 6 months. *Lasers Surg Med.* 2010;42:609-614.

² West TB, Alster TS. Comparison of the long-pulse dye (590-595 nm) and KTP (532 nm) lasers in the treatment of facial and leg telangiectasias. *Dermatol Surg.* 1998;24(2):221-226.