Endovenous laser ablation of great and small saphenous vein incompetence with a 1470-nm laser and radial fiber.

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Endovenous laser ablation (EVLA) of great (GSV) and small saphenous vein (SSV) chronic insufficiency with 1470-nm diode laser and radial fiber yields good short-term results. The aim of this study was to assess its efficacy after at least 12 months of follow-up.

We performed a prospective interventional cohort study in an ambulatory care/day surgery setting. Consecutive patients with chronic, symptomatic GSV or SSV insufficiency were treated by EVLA with a 1470-nm diode laser and a radial fiberoptic. Patients were recruited between 2008 and 2011, and the follow-up was completed in 2012. All patients underwent clinical and echo color Doppler evaluations during follow-up. The primary outcome was the incidence of echo color Doppler-confirmed failures during follow-up. We also investigated potential associations between failures and patients' characteristics, echo color Doppler findings, or surgical features. The secondary outcome was the postoperative pain course.

EVLA with 1470-nm diode laser and radial fiberoptic is effective for treatment of GSV and especially SSV insufficiency and is well tolerated by the patients.