



Ten Conclusions after Ten Years Experience in Radical Endovenous Laser Therapy of Lower Extremity Varicose Veins

Maly I^{1*}, Julinek S² and Klein D²

¹Department of General and Vascular Surgery, General and Vascular Out-patient Surgery Centre, Palas Athena Hospital, Czech Republic

²One-Day Surgery Department, Palas Athena Hospital, Prague, Czech Republic

Editorial

We have been performing the radical endovenous laser therapy, ELVeS, in the treatment of the chronic insufficiency of the saphenous veins since 2004. The 980 nm wave-length has been used until the end 2007, and the 1470 nm from 2008, to date. All patients underwent the procedure under conditions of aseptic operating theatre. In total we treated 835 patients, the great saphenous veins in 724, the small saphenous veins in 103, bilateral in 102, the accessory veins in 77 cases. We always sought to treat simultaneously all varices on the extremities during the initial endo-laser therapy. All dilated branches were closed by laser, or instrumentally, or by sclerotisations.

Withing 1 to 8 years after the procedure were examined 53.6% patients. The partial recanalisations in the main veins were observed in 6.5% pts with 980 nm and in 8.5% with 1470 nm device, the complete recanalisation in 2.8% pts with 980 nm and in 2.3% with 1470 nm device. All patients with recanalisations were reoperated. The recurrence in the groin was found in 2.8% pts with 980 nm and in 5.5% with 1470 nm device. The immediate complications after surgery were: longer lasting paresthesia in 2.6%, skin burn of mild degree in 1.6%, deep venous phlebotrombosis in 0.2% pts.

- The indications for ELVeS of magistral veins and their branches must be established after the clinical and the ultrasound Doppler examination. This enables to determine the extent of the surgery for the individual patient.
- ELVeS should be performed at Surgery, Angiosurgery or Phlebology Departements respectively, where the procedure can be modified or extended for example with crossectomy, ligature, instrumental resection of the branches, etc.
- We believe, that the standard approach to the ELVeS procedure is that it should be performed under aseptic conditions in the operating theatre with multiple choices of analgesia. The only out-patient setting often limits the extent of the radical treatment.
- The specialization of the physician shouldn't limit the primary procedure. The extent of the procedure should be determined after the basic examination, if and where the crossectomy, ligature, modified „pinhole“ crossectomy, instrumental removal of too coiled branch, foam sclerotization, etc., is to be performed „legeartis“.
- The nature of the disease itself predicts, that the chronic venous insufficiency is a long term, sometimes even life long burden for the patients. It is determined genetically, professionally-static load, constitutionally-overweight, hormonally-contraception, and by bad habits-smoking, etc. The primary extent of the procedure is the key factor of the treatment in reducing the recurrence of the disease.
- Long term prevention of the recurrence of the disease including patients' follow up is also very important. This is the only way to reduce late complications and recurrences, e.g. in the extreme static load, sports, travelling, etc.
- While some authors emphasize also the established role and comeback of stripping or cryostripping surgical procedures, after their long term/10 years and more/, it is necessary to keep emphasizing big advantages of endovasal procedures, of course if the complexity of the primary treatment, including combined procedures, is respected.

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*Correspondence:

Ivan Maly, Department of General and Vascular Surgery, General and Vascular Out-patient Surgery Centre, Palas Athena Hospital, Prague, Czech Republic,

E-mail: i.maly@seznam.cz

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- Concurrent price evaluation of the individual therapeutical methods is and will be, very important, also when compared to the traditional stripping method.

- Nowadays, no method of the radical treatment of the insufficiency of the superficial venous system can be considered obsolete for the above mentioned reasons. Recently, the combined procedures have been used more and more.

We believe, that the future of the radical endo-laser closure of

the insufficient superficial venous system of the lower limbs lies in a further improvement and wide use of different types of fibers and laser energy with a wavelength around 1500 nm and with the possibility of a simultaneous percutaneous treatment of intracutaneous spider veins. Or even higher wavelength may be used. Further technical development is very likely in this area, as well as the establishment of internationally recommended standards of the treatment.