11 years experience with endovenous laser ablation of varicose veins

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Introduction: The authors of the retrospective study present 11 years outcomes with endovenous laser ablation of the varicose veins.

Material & Method: Endolaser surgery of varices has been performed since 2004, firstly with the instrument of 980 nm wavelength and exclusively with 1470 nm wavelength laser beam since 2008. All procedures were performed only in “One day surgery” mode. At the beginning, we used general anaesthesia and later we preferred combination tumescent anaesthesia and analgaesia and for the big tributary veins we often performed phlebectomy or the endovenous laser during the procedure on the main vein. In our patients the procedure is always performed under the protection of LMWH, in accordance with other authors.

Results: 970 patients, who passed the total of 1120 ELVeS procedures in the period from 2004 till 2015, were assessed in this study. 102 of the procedures were bilateral; the great saphenous vein was treated in 724 patients, the small saphenous vein in 103 patients and accessory saphenous vein in 77 patients. The reflow in the great saphenous vein occurred in 5.88%, and in the small saphenous vein in 8.82%. The long lasting paraesthesia occurred in 2.6% of patients. We noted only one deep vein thrombosis and no pulmonary embolism.

Conclusion: The introduction of endovenous thermal methods was a very significant progress in venous surgery during past decade. We did not find the differences in an efficacy between 980 and 1470 nm wavelength. We confirm, that endovenous laser ablation is the successful and safety procedure.