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PRESERVATION OF SAPHENA IN VARICOSE VEINS SURGERY.

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Introduction. Thermal ablation and surgical removal of varicose veins (GSV) have been recognized for treating lower extremity varicose veins, but their long-term clinical efficacy is questionable. Selective phlebectomy of dilated tributaries, which is less traumatic and has a lower complication rate, may be justified for maintaining an inconsistent GSV trunk due to its association with hypervolemia in varicose tributaries.

Aim: to focus on the on the necessity of the preservation of saphenous vein during the treatment of varicose veins.

Materials and methods. This review article synthesizes current research on the necessity of preservation of saphenous vein in the treatment of varicose veins through a prospective observational cohort study (ClinicalTrials.gov ID: NCT04034329). Patients at a single center (University Hospital No. 10, Minsk, Belarus) were included onwards and all data were entered in a database.

Results and their discussion. This study analyzed the evolution of varicose symptoms in patients with a varicose disease (VARICOS) before and after surgery. The ASVAL group had higher VCSS before surgery than the EVLA group, but no significant difference in VCSS post-operation. Clinical recurrence did not differ between the ASVAL and EVLA groups 2 years after treatment. Duplex reflux and GSV incompetence were not significant in the ASVAL group after 2 years, but the diameter of the GSV significantly decreased in the ASVAL group. Complications included postoperative thrombosis of the GSV in one ASVAL patient and endothermal heat-induced thrombosis in the EVLA group. Recurrences were detected in 40% of ASVAL and 45.6% EVLA groups, and repeated interventions were performed in 5 ASVAL and 9 EVLA groups. The study suggests a cost-effective, individualized approach to varicose disease treatment, focusing on saphenous vein preservation rather than the removal of the GSV. This approach is based on health status, clinical manifestations, and DUS venous hemodynamics. The study suggests using less traumatic ASVAL techniques for mild varicose disease and GSV diameter ≤ 6 mm. Preserving the GSV and selective phlebectomy may reduce varicose vein recurrence after pregnancy.

Conclusion. Patients suffering from varicose disease with GSV incompetence have certain differences in severity and the course of the disease, therefore treatment should be individualized. We found similar good results using the following treatment options: selective phlebectomy with GSV preservation for patients with diameter ≤ 6 mm and mild clinical course of the disease and/or with mostly cosmetic concerns; and GSV ablation with concomitant phlebectomy in more severe clinical cases and GSV diameter > 6 mm. Both ASVAL and EVLA effectively improve the disease severity in the groups of patients, selected according to the GSV diameter. The results obtained in a prospective study of GSV preservation in real clinical practice are quite encouraging. Further large randomized trials will probably provide more **evidence** on this topic.