

## THE ROLE OF MODERN SCLEROTHERAPY IN VASCULAR SURGERY

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### Annotation

To improve the quality of life of patients with dilated veins, suspected varicose veins and patients with comorbidities who do not have indications for a high level of invasiveness, to study the degree of change in working capacity and provide information about it.

**Keywords:** high radio frequency, pulse, varicose veins, sclerotherapy, diabetes melliteus, flebectomy, ethoxisclerol.

Introduction. Today, sclerotherapy is one of the most popular minimally invasive surgical methods, which allows not only to destroy varicose veins, but also to correct impaired hemodynamics in varicose veins (elimination of pathological blood flow - reflux). The popularity of sclerotherapy is due to its low cost, technical simplicity and availability, almost ideal aesthetic and functional results.

The main disadvantage of the technique is insufficient radicality - a vein that has not been surgically removed may rejoin the blood circulation as a result of recanalization, or new varicose veins may appear in place of the former veins due to the development

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of the disease. At the same time, modern methods of sclerotherapy using foam preparations, ultrasound, several point injections into reflux sites, operations and endovasal thermal obliteration (EVTO) allow achieving comparable results. The correct definition of indications for sclerotherapy and its implementation by a highly qualified specialist can reliably eliminate varicose veins, especially in the early stages of varicose veins.

### **Purpose of Study**

Treatment of varicose veins of the legs by methods of endovasal thermal obliteration (EVTO) and intravenous administration of sclerosing drugs while maintaining the ability to work and quality of life of patients with such minimally invasive surgical methods.

### **Materials and Methods of Research**

The department of vascular surgery of the Tashkent Medical Academy examined 25 patients with varicose veins and suspected varicose veins, with concomitant diseases. The audits were carried out from February 2021 to February 2023. At the same time, patients with 0, I, II degrees of venous dilatation were observed and there is a risk of observation, patients with concomitant diseases, especially diabetes mellitus, obesity, heart and vascular diseases, open surgeries and a modern high-frequency generator (HFG) studied the extent to which the performed procedures have changed the quality of life of patients.

### **Results**

It was noted the expansion of superficial veins 0, I, II, III levels. Studied in 25 patients at risk of dispensary observation and concomitant diseases. Of these, 24% (16/25) of patients had grade 0 dilatation, 20% (5/25) of patients had grade I dilatation, 16% (4/25) of patients had grade II dilatation, and 8% (2/25) of patients had superficial vein III degree, revealed vasodilation. 32% (8/25) of the 25 patients studied had comorbidities. Of these, 62.5% (5/8) of patients had obesity and arterial hypertension, 25% (2/8) of patients had diabetes mellitus, 12.5% (1/8) of patients had heart and vascular diseases, including cancer (2010 years) and was found to be overweight. 4 patients with level 0, 3 patients with level I, 2 patients with level II, 1 patient with cardiovascular disease, 1 patient with large body weight, 1 patient with diabetes mellitus or 48% (12/25) of patients with modern minimally invasive high sclerosis of the radiofrequency generator (RFG), in 2 patients of the III degree, in 3 patients with a large body weight, in 2 patients of the II degree, i.e. 28% (7/25) of patients underwent open flebectomy.

The remaining 24% (6/25) of patients underwent sclerotherapy. 58.3% (7/12) of patients with grade 0 and I within 3 days, 25% (3/12) of patients with grade II and cardiovascular disease within 7 days, heavy body weight and diabetes mellitus 16.7 %

(2/12) patients restored their full quality of life and ability to work within 20 days. Patients who underwent open flebectomy restored their quality of life and ability to work within 15 days. Complications during the sclerosing procedure using a modern minimally invasive high-frequency generator (HFG) were observed in 8.3% (1/12) of patients.

### Conclusion

It has been established that the quality of the sclerosing procedure performed using a modern minimally invasive high-frequency generator depends on the level of the disease and the presence of concomitant diseases in patients. In particular, this method is preferable for patients due to the absence of cosmetic defects and quick recovery, and the disadvantages are that in some cases, due to microwave energy, which gives the quality of this device, it can cause ulcers in patients with diabetes mellitus. In addition, it is possible to find out to what extent the blood vessels work by converting the oscillations that occur in the blood vessels into impulses using the apparatus created and improved by the authors.

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