

# OPTIMIZATION OF SURGICAL TREATMENT OF VARICOSE DISEASE OF LOWER EXTREMITIES

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**Abstract:** our studies show that the reflux of blood in patients with VDLE in the distal parts of LSW is rare, in only 15-16% of cases. In this regard, the total stripping of the LSW, that is, from the groin to the medial malleolus - is not pathogenetically substantiated. First, removal of the LSW should only be within the pathological reflux of the blood (85% of cases) - from SFS to the upper third of the shin. Secondly, the total stripping of LSW is very often accompanied by damage to lymphatic vessels and cutaneous sensory nerves.

**Keywords:** subcutaneous veins of lower extremities, varicose veins, total stripping.

# ОПТИМИЗАЦИЯ ХИРУРГИЧЕСКОГО ЛЕЧЕНИЯ ВАРИКОЗНОЙ БОЛЕЗНИ НИЖНИХ КОНЕЧНОСТЕЙ

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**Аннотация:** наши исследования показывают, что рефлюкс крови у пациентов с ВБНК в дистальных отделах БПВ встречается редко, всего в 15–16% случаев. В связи с этим, тотальный стриппинг БПВ, то есть от паха до медиальной лодыжки – патогенетически не обоснован. Во-первых, удаление ствола БПВ должно быть только в пределах патологического рефлюкса крови (85% случаев) – от СФС до верхней трети голени. Во-вторых, тотальный стриппинг БПВ очень часто сопровождается повреждением лимфатических сосудов и кожных чувствительных нервов.

**Ключевые слова:** подкожные вены нижних конечностей, варикозная болезнь, тотальный стриппинг.

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One of the most urgent problems of treating diseases of the peripheral vascular bed is varicose disease of the lower extremities (VDLE). The high frequency of this disease, its complications and relapses necessitates increased attention of surgeons to VDLE. An additional factor in the severity of the problem of varicose veins is the average age of patients 45.5 years, which is at the peak of human performance. The incidence among the female part of the population is 1.5-3.5 times higher, however, a sharp increase in the incidence of VDLE among men following the epidemiological studies conducted in the 1960s and 1970s was noted last century. This phenomenon is associated with a radical change in the way of life among the European population [3, 5, 9, 10]. Varicose veins have a number of characteristic features that are undesirable to stop by one standardized scheme of surgical treatment. However, to date, the vast majority of patients receive surgical care in general surgical departments, which causes relapses in 70% of cases [1, 4, 6, 8]. Thus, for today, healthcare is faced with the complex task of providing medical care to people suffering from diseases of the veins of the lower limbs. One of the modern methods of treatment of VDLE, which allows to reduce the recovery period and get a good cosmetic effect, are the operations of a vein-preserving nature. With a simultaneous correction of blood flow in segments of the detected violation of venous circulation, only those veins in which irreversible wall changes are detected

are removed [3, 9, 10]. A large subcutaneous vein (LSW) with acute deep vein thrombosis and postthrombophlebitic disease is the main factor of venous return, which is the reason for the reasonableness of such tactics. In addition, it is necessary to take into account the fact that the safety of HPV and the prevention of its varicosity is important for possible plastic intervention in the surgery of the coronary and peripheral arteries [7]. It is also important that the minimalism of traumatic interventions is the prevention of the development of postoperative complications [6, 9, 10]. To date, there are more than 300 ways to quickly correct venous diseases, but there are not enough radical ones among them. Typical features of the proposed methods are the traumatic nature of the intervention (Modelung, Linton, Felder and others), after which there are rough scars, the risk of lymphatic edema of the lower extremities, wound suppuration and marginal necrosis of the skin increases [2, 5, 8]. Modern phlebology has made significant progress in recent years, but there are still unsolved tasks to rationalize the diagnosis and optimize the surgical treatment of patients diagnosed with VDLE. Thus, research in the field of development and introduction into surgical practice of innovative and highly informative diagnostic methods and the most effective methods of surgical treatment are topical and have not only medical but also social significance.

**Materials and methods of research.** The work is based on the results of a comprehensive examination and surgical treatment of 88 patients with primary varicose veins of the lower extremities operated in the department of surgery of the Samarkand State Medical Institute clinic from September 2012 to January 2015. Depending on the method of surgical intervention, the patients were divided into 3 groups. In Group I (n = 26-37.1%), a cross - ectomy was performed on Chervyakov, Operation by Babcock, removal of inflows of LSW and small superficial vein (SSW) in Narat. Group II (n = 44-62.9%) performed a groinectomy with groin access, short stripping (CS), and removal of inflows of BPV and MPV by Mueller. In a comprehensive examination of patients, in addition to standard clinical analyzes, mandatory ultrasound dopplerography (ultrasound) was included. According to its diagnostic capabilities, ultrasound is not inferior to contrasting phlebography and is the "gold standard" of modern diagnostics of chronic venous insufficiency all over the world. In our studies all patients in the preoperative period performed only ultrasound. With the help of this, the optimal volume of surgical intervention is determined and the inexpediency of total LSW stripping is justified. The lesion in the LSW pool was present in 63 (71.6%) limbs, the combined lesion of LSW and SSW was present on 7 (28.4%) extremities, isolated SSW lesion was not observed. In 44 patients (62.9%), valve failure and varicose dilatation of the LSW were only on the thigh and upper third of the tibia, therefore, in order to maximize the preservation of the saphenous vein, we restricted the CS, and access to the saffenofemoral sast (SFS) was inguinal, varicose tributaries removed Through mini-cuts by Muller. Stripping was performed by an invagination method, which significantly reduces the number of postoperative complications, such as damage to the nerves and surrounding tissues. 26 patients (37.1%) underwent phlebectomy of the LSW all along with the removal of tributaries along Narat. Combined phlebectomy is a multi-component operation. Execution of the peresthetic dressing of LSW is the first stage of combined phlebectomy. In our study, access to SFS was carried out in two ways: skew-longitudinal, according to Chervyakov, and inguinal. Access to Chervyakov almost in 10% of cases led to lymphatic complications as a result of damage to lymphatic vessels located exactly in the projection of the incision. Almost half of the patients in the control group were dissatisfied with the cosmetic results of the postoperative scar. The advantages of inguinal access are the minimal possibility of damage to the lymphatic vessels, the proximal branch of the LSW can be detected very quickly, since it is located directly in the center and in the depth of the wound. After 5 months. After intervention, a thin scar was formed, which was invisible visually in the majority of patients. Manipulations in patients with increased body weight are conducted at considerable depth and require the surgeon to be attentive to the proximal tributaries, since the developed bleeding from damaged inflows in a relatively small but deep surgical wound is rather difficult to stop. The retention of a long stump of LSW with inflows is the most common cause of recurrence of VBN after safenectomy (2.3%). A typical mistake many surgeons have is tying the LSW distally to the mouth of the tributaries. To avoid this, the SFS should be fully mobilized, and the surgeon should see the wall of the femoral vein at the site of HPV inflow. Thus, an optimal method for adequate up to wellhead ligation of LSV is a groinectomy with inguinal access. The number of complications with this method is much lower, and an excellent and good cosmetic result is achieved in 96.7% of cases. In connection with the anatomical variability of the location of the sphenoplastial anastomosis (SPA), SSW ligation should be performed after ultrasound mapping of the anastomosis. Since, the cohust is located at a sufficient depth, subfascially, the separation of the terminal department of the SSW presents technical difficulties. Access, made distal to the SPA projection by 1-1.5 cm, makes it easy to detect the MPV and perform its wall ligation to the popliteal vein (PV) without the risk of leaving a long stump.

**Conclusions.** Our studies show that the reflux of blood in patients with VDLE in the distal parts of LSW is rare, in only 15-16% of cases. In this regard, the total stripping of the LSW, that is, from the groin to the medial malleolus - is not pathogenetically substantiated. First, removal of the LSW should only be within the pathological reflux of the blood (85% of cases) - from SFS to the upper third of the shin. Secondly, the total stripping of LSW is very often accompanied by damage to lymphatic vessels and cutaneous sensory nerves. Third, the segment of the SFA on the tibia, if necessary, can be used as a material for shunting the coronary

arteries. Fourth, the LSW on the shin can be used in the future as an autoprosthesis only if short stripping is performed without ligation of the vein at the medial malleolus. As a result of the carried out researches it is possible to conclude the following: removal of the LSW only at the level of the altered site is pathogenetically grounded, in a low-traumatic manner in comparison with the traditional phlebectomy by Babcock.

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