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# ASSESSMENT OF THE QUALITY OF LIFE OF PATIENTS AFTER SURGICAL INTERVENTION FOR VARICOSE VEINS OF THE LOWER LIMB

### Introduction

Quality of Life (QoL) assessment - reliable, informative and cost-effective method of studying the patient's health both individually and group level. The history of studying quality of life begins in 1947. when prof. Columbia University, USA D. Karnovsky published work "Clinical Evaluation of Chemotherapy for Cancer", which comprehensively investigated the personality of a patient suffering from somatic diseases. Research played an important role in the development of the methodology for studying Quality of Life (QoL) assessment. McSweeny, who proposed assessing quality of life based on four aspects (emotional state, social functioning, daily activities and leisure activities). Currently, QOL recommendations of the World Health Organization (WHO) is assessed according to the following criteria: physical, psychological, level independence, social life, environment, spirituality. Research on Quality of Life (QoL) in phlebological patients is promising to analyze the effectiveness of treatment of varicose veins of the lower limbs. Initially, the quality of life of patients with lower venous disease limbs were assessed using general questionnaires: NHP, SF-36, EuroQol [2]. However, it soon became obvious that none of the existing tests in does not fully allow adequate assessment of Quality of Life (QoL) in venous diseases. This led to the need to develop a separate questionnaire for patients with diseases of the venous system. First the test developed for patients with chronic venous diseases, contained questionnaire of 95 questions. After conducting a long statistical and mathematical analysis, the first version of the Chronic questionnaire was released Venous Insufficiency Questionnaire (CIVIQ-1), consisting of 18 items: 17 - general and 1 – assessing work activity [2, 3]. Second version questionnaire (CIVIQ-2), includes 20 questions, each of which was assessed on a scale from 1 to 5 points [1]. At the last analysis, the questionnaire included a clause on the impact of health status on daily activities, which made it possible to use this questionnaire both for working people and for non-working patients. In addition to the above, questions have been added: reflecting the intensity of pain during thrombophlebitis and the possibilities the patient to leave the house.

## Goal

To assess the quality of life of patients after surgery for varicose veins of lower limb with various methods of surgical intervention.

### Material and methods of research

An analysis of the quality of life of 50 patients after surgery for varicose veins of lower limb was carried out in surgical department No. 2 of the State Healthcare Institution "Gomel City Clinical hospital No. 3" using an international phlebological questionnaire CIVIQ – 2 (Chronic Venous Insufficiency Questionnaire). Total score was set on a scale from 20 to 100, where 20 is the best indicator of quality of life, and 100 is the worst. The patients were divided into 2 groups. First group (N=26) – patients who underwent "classical" phlebectomy. The second group (N=24) – patients who underwent endovenous laser coagulation of the great

saphenous vein with miniphlebectomy varicose saphenous veins. The groups were comparable by gender, age and degree of chronic venous insufficiency. Quality of Life (QoL) was assessed in the immediate postoperative period (1 month after surgery) and in the long term (2–3 years after operations).

## Results of research and their discussion

When assessing quality of life, the sum of points on the CIVIQ-2 questionnaire was noted deterioration of quality of life in patients after traditional phlebectomy in early terms (1 month) up to 38 [35–42] (Mean [25–75%]) and much better indicators after endovenous laser coagulation: 26.5[24–29] - in the same period (Figure 1).



Figure 1 – Diagrams of distribution of QOL scale values after traditional phlebectomy (Var3) and endovenous laser coagulation (Var4) in the immediate postoperative period

In the long-term postoperative period (up to 2–3 years), the total Quality of Life (QoL) score. In the standard phlebectomy group improved and was almost equal to indicators of the second group: 28.5 [25–36] after standard phlebectomy and 29 [25.5–33.5] after endovenous laser coagulation of large subcutaneous. Veins with minor phlebectomy of varicose saphenous veins.



Figure 2 – Diagrams of distribution of QOL scale values after traditional phlebectomy (Var2) and endovenous laser coagulation (Var1) in the long-term postoperative period

The total assessment of Quality of Life (QoL) and its components significantly complements. Characteristics of the pathological process in patients with cardiovascular. Vascular diseases, its dynamics under the influence of therapeutic activities, providing valuable information about the patient's response to disease and therapy, which contributes to individual therapeutic approach for further studies of quality of life in phlebologists. Patients are promising for differentiated analysis of its parameters in relation to indicators of clinical and special research methods in both therapeutic and prognostic aspects.

#### Conclusion

Quality of Life (QoL) should be considered as an independent indicator in patients with chronic venous diseases, no less important than usual assessed clinical parameters in the late stages after the Treatment, especially surgery.

Carrying out endovenous laser coagulation for combined phlebectomy instead of standard stripping of the great saphenous vein improves patients' quality of life compared to traditional phlebectomy after 1 month after surgery, but does not have statistically significant differences in long-term postoperative period (after 2–3 years).

#### LITERATURE

1. Evaluating and improving health-related quality of life in patients with varicose veins / J. J. Smith [et al.] // Journal of Vascular Surgery. – 1999. – Vol. 30, iss 4. – 1999. – P. 710–719.

2. Quality of life assessment before and after surgery for lower limb varicose veins / F. A. Rocha [et al.] // J. Vasc Bras. – 2020.

3. *Pelin Tuncer Çoban*, Evaluation of quality of life after minimally invasive varicose vein treatment / Pelin Tuncer Çoban, Elif Dirimeşe // J. Turk gogus kalp damar cerrahisi derg. – Vol. 27, iss 1. – P. 49–56.