VOLUME-4, ISSUE-6

COMPARATIVE ASSESSMENT OF THE QUALITY OF LIFE IN PATIENTS AFTER LOWER EXTREMITY AMPUTATION AGAINST THE BACKGROUND OF DIABETES MELLITUS

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The relevance of research. The relevance of the medical and social problem of diabetes mellitus and the associated diabetic foot syndrome (DFS) is related to the high, progressive prevalence, disability, and increasing mortality of these patients.

The aim of the study is to improve the quality of life of patients with diabetic gangrene of the lower extremities by selecting optimal methods for high and low amputations.

Materials and methods of research. In this work, the results of surgical treatment of 311 patients for 2017-2022 were analyzed. These patients received inpatient treatment with surgical complications of DFS against the background of diabetes mellitus in the Department of purulent surgery and surgical complications of diabetes mellitus at the multidisciplinary clinic of Tashkent State Medical University.

All patients were divided into 2 groups depending on the degree of purulent-necrotic lesions of the feet. The I-th group (comparison) consisted of 148 patients (47.6%), and the II-th group (main) consisted of 163 (52.4%) patients who underwent lower limb amputation. Long-term intra-arterial catheter therapy was used in the complex treatment, and balloon angioplasty was performed for the neuroischemic form of DFS.

The patients were aged between 40 and 85 years, with the majority (181, 58.2%) being between 60 and 74 years old. The average age of the patients in the main group was 62.3±5.1 years, while in the comparison group it was 61.2±4.6 years. The majority of the patients were male, accounting for 66.2%, while the female population was 33.8%.

In the comparison group, the ratio of small foot amputations to high amputations was 26.3% to 73.7%. In patients with distal foot gangrene, only metatarsal amputations were performed. No other foot resection techniques were used in this group. High lower limb amputations were divided into two groups: those at the level of the lower leg and those at the level of the thigh. The ratio of these groups was 57.8% to 42.2%. Each anatomical zone (lower leg and thigh) was divided into 3 levels (lower, middle, and upper thirds) based on the bone truncation level.

Unlike the comparison group, we performed more sparing amputations in the main group, both on the foot and above the knee joint. 40 (24.5%) patients underwent various types of foot resection, and these surgeries were also performed according to specific criteria. The main effective operation in this area was the Goranjo foot amputation, but we modified this procedure based on changes in the biomechanics of the foot after removing the toes or the distal part of the foot. In 13 (8.0%) cases, patients in the main group with gangrene of the distal part of the foot and destruction of the tarsal bones underwent Pirogov foot amputation, which was also modified by us. The nature of the lower leg amputations at the level of the lower leg bone truncation did not differ from the comparison group, but the technical aspects were improved in the main group. Usually, after high amputations at the hip level, patients do not use prostheses, or they may not be able to walk on prostheses due to their physical condition. Therefore, in 14 (8.4%) patients

with total gangrene of the lower limb below the knee, we performed a Gritti-Shimanovsky amputation, which also had its advantages over other types of hip amputations.
We used the SF-36 questionnaire to determine the nature and quality of life of patients with lower limb amputations in the long term.

When analyzing the results, it was found that in the comparison group, the quality of life of patients with lower limb amputation was 70.2% in terms of vitality, 57.4% in terms of social functioning, 77.0% in terms of role functioning, and 60.8% in terms of psychological health. In the main group, the quality of life was 79.7% in terms of vitality, 78.5% in terms of social functioning, 82.8% in terms of role functioning, and 79.1% in terms of psychological health.

Summing up the data of the patients in the compared groups, we can say that by reducing the likelihood of possible complications from the postoperative stump, we can achieve favorable results for such a severe patient population. Overall, we have managed to improve the vitality of patients in the main group by almost 10% (from 70.2% to 79.7%). By using early activation or prosthetics for the amputated lower limb, the social functioning of amputees with DFS has increased by 20%.

Conclusions. Thus, in general, using an improved algorithm for surgical treatment of patients with critical ischemia threatening limb loss against the background of DFS in the main group of patients, we were able to improve the quality of life from 66.3 to 80%. The above facts and figures convincingly prove that small foot amputations and high lower limb amputations should be performed taking into account their impact on the quality of life.