



ANALYSIS OF THE RESULTS OF TRADITIONAL TREATMENT OF DIABETIC FOOT SYNDROME IN PATIENTS WITH CRITICAL LOWER LIMB ISCHEMIA

Nazarov J. R.

Bukhara State Medical Institute

Safoev B. B.

Bukhara State Medical Institute

Introduction

Numerous studies have shown that stenotic and occlusive lesions of the vascular bed increase the occurrence of gangrene in men with diabetes by 53 times and in women by 71 times when compared to the general population [2,4]. Additionally, the distribution by age groups revealed that diabetic patients develop gangrene 156 times more frequently at age 50, 85 times more frequently between the ages of 50 and 60, and 53 times more frequently over the age of 70 compared to people in the same age group who have normal carbohydrate metabolism. The frequency of amputations remains high in people with diabetes at the present time [1,3].

The Aim of the Study was to study the effectiveness of traditional treatment of diabetic foot syndrome in patients with critical lower limb ischemia.

Materials and Methods of Research

132 patients with critical ischemia of the lower extremities with severe diabetic foot syndrome who received inpatient treatment at the clinical base of the Bukhara State Medical Institute of the Bukhara Multidisciplinary Regional Medical Center for the period 2010 to 2019 were examined. Of 132 patients, 88 (66.6%) underwent amputation at the shin level according to the method developed at the A.V. Vishnevsky Scientific Medical Research Center of Surgery of the Russian Federation, 28 (21.2%) patients underwent atypical foot resection, 12 (9%) patients underwent finger amputation, 4(3%) patients had limited with necrectomy of the affected lower limb. It should be noted that all patients received inpatient treatment from 2010 to 2019, in the period before the introduction of angiographic studies in our clinic.

Among all patients, there was a multilevel lesion of the arterial system of the limb with occlusive stenotic lesion, including femoral (general, superficial and deep), popliteal, and lower leg arteries (anterior and posterior tibial, interosseous).



Based on the clinical examination, further treatment tactics were determined, depending on vascularization.

The clinical blood test included the determination of the number of red blood cells, hemoglobin content and platelet count, as screening tests; the number of white blood cells by hardware method. The leukocyte formula was calculated by visual microscopic examination of stained smears, which made it possible to detect the presence of a regenerative leukocyte shift in the form of an increase in the ratio of rod-shaped neutrophils to the total number of leukocytes of more than 6%.

Bacteriological examination was carried out from two sources by sampling secretions from the flounder muscle, as well as from the tissue of the wound bed during surgery with qualitative and quantitative determination of wound microflora and its sensitivity to antibiotics.

The degree of endogenous intoxication was assessed by the volume of medium molecular weight peptides (OSM) using spectrophotometry at a wavelength of 210 nm.

Results and their Discussions

Duplex angioscanning of the vessels of the affected lower extremities in most cases revealed: in a.poplitea bone vascular patency with a critical decrease due to stenosis. a. posterior tibia, a. anterior tibia, a.dorsal bone.

Analysis of the duration of purulent-necrotic foot lesion (GNPS) before admission to the clinic of patients of the comparison group revealed that from 132 (100%), 34(26%) they were admitted to the clinic 30 days or later after the onset of the disease. 68 (51.2%) patients applied to our clinic from other medical institutions due to failure treatment. The majority of patients with IV-V degree of limb damage showed signs of intoxication and anemia at late admission.

When assessing purulent-necrotic limb lesions in patients of the control group, it was revealed: most cases of patients were with lesions of the I finger 14 (10.6%), I and II fingers 12 (9.1%), soles 24 (18.2%), Foot 28 (21.2%) and lower leg 14 (10.6%). 39.4% of patients had lesions of II 8(6.1%), III 14(10.6%), IV 10(7.5%), V 8(6.1%) fingers of the limb.

The results of the study of patients in the control group on the localization of the purulent-necrotic process showed that the pathological process in the area of the first toe was distinguished by the most malignant course, especially with its combined lesion with the rest of the fingers, than with the lesion of other fingers



and their combinations. This is due to the topographic and anatomical feature of the first toe.

The study of the microflora of purulent necrotic wounds of patients of the control group revealed the following points: as can be seen from Table 3, 76 strains of aerobic microflora were detected in 66 patients examined in the comparison group. Most cases were sown with *Staphylococcus aureus* (44.7%), *Proteus spp.* (28.9%). both *Streptococcus* and *E. coli* were 18.4% and 7.9%, respectively.

The following criteria for assessing the condition of patients were indicators of general intoxication of the body.

It should be noted that in the course of treatment, with the normalization of all indicators of intoxication, there were tendencies to slow normalization.

The study of the functional state of the vessels was carried out using duplex angioscanning, by determining the regional MSS and MDS. Examination of blood vessels by yourself. The posterior tibial muscle on the day of admission showed that MSS, MDS were significantly lower than normal – 30.5 ± 1.2 and 2.2 ± 0.16 , respectively.

Taking into account the degree of lesion, level and localization, data from objective, subjective studies, as well as taking into account the results of duplex angioscanning according to the indications of 132 patients examined, amputation at the shin level was performed in 88 (66.6%), atypical foot resection 28 (21.2%), finger amputation 12 (9%), necrectomy in 4 (3%) sick.

The average duration of inpatient treatment was 14 ± 2.5 days.

So, in our study, the following unsatisfactory results were observed; suppuration of a postoperative wound in 32 (11.9%) patients of which resulted in forced reamputation of the lower leg in 10 (3.7%) cases, in one case a high amputation was performed at the hip level. In eight cases (3.0%), a fatal outcome.

All of the above points to the development of a new treatment approach that helps to reduce the volume and traumatism of the operation, as well as postoperative complications.

Analyzing these observations, we came to the conclusion that in order to improve the results of treatment of these categories of patients, it is necessary to use angiographic studies of blood vessels and, based on their results, apply endovascular minimally invasive surgical methods.



Conclusions

1. When assessing the objective state of the degree of lesion in critical ischemia of the lower extremities of patients with SDS, the Wagner classification is acceptable.
2. Traditional methods of treatment of patients with KINK with SDS without the use of endovascular diagnostics and surgical interventions do not give the desired treatment result.
3. Surgical treatment of patients with KINK with severe SDS lesions is urgent and requires improvement of diagnostic and treatment methods.

List of Literature

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