

**Clinical characteristics of patients with diabetes-related foot complications and results of their treatment in surgical department of city hospital of Cherepovets**

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In many regions of Russia data about foot complications are absent or lacking, and the medical care for diabetic foot patients remains a great problem. Lower extremity amputation (LEA) continues remain the most often outcome, especially for small cities. **Background and aim:** to study the short-term outcomes of people with foot complications of diabetes mellitus (DM), which were hospitalized in surgical department of city hospital N 1 of Cherepovets in 2010; to calculate the major amputation rate and mortality of people due to complications of major amputations. **Materials:** Local database of the city hospital N1 in Cherepovets. Hospital's medical records of patients with DM were analyzed for the 1 year period. The following items were estimated: purpose of hospitalization, condition of patient on the admission (glycemia, leukocytosis, fever, erythrocyte sedimentation rate), type of treatment (conservative, operative), level of lower limb amputation, duration of hospitalization, outcomes for patients, outcomes for lower limbs. **Results:** Out of 1102 pts admitted for surgery 7,9% were patients with diabetes-related foot complications. Type DM 1/2: 6,9%/93,1%; men/women: 34,5%/65,5%; age  $66,6 \pm 13,5$  years; duration of DM  $13,0 \pm 8,1$  years. 29,9% of patients had the history of LEA. 62,1% of patients were hospitalized urgently, more than half of them had the signs of severe infection (fever 33,3%, high erythrocyte sedimentation rate - 46%, leukocytosis 56,3%) and disturbance of DM (glycemia  $10,9 \pm 5,2$ ). Frequency of repeated hospitalizations was 17,2%, 60% of them were urgent. Foot ulcer was the main cause of the admission: 60,9%. The median duration of the ulcer before the admission was  $3,2 \pm 8,0$  weeks (0,2-52 weeks). LEA were performed in 41,1%, 55,6% of them were major. The mortality after major amputation was 20%. The mean duration of hospitalization was  $20,1 \pm 13,5$  days. 33,4% patients didn't have any sign of infection or foot ulcer at admission. These patients were hospitalized for conservative medical treatment. The duration of hospitalization in this group was  $13,7 \pm 5,8$  days. **Conclusion:** The diabetes-related foot complications are the frequent cause of hospitalization to surgical department. The rate of major amputation and mortality are still extremely high. It is caused of absence of available out-patient foot care department. Hospitalization for "pre-planned treatment" (with absence of evidences of effectiveness) leads for the additional load for surgery department and increases the cost of treatment. Thus the problem of foot care is typical for this region. These data suggests the necessity of changes in organization of the treatment in hospital and in out-patient care.