

Are Men more Prone to Lower Limb Amputation in Diabetic Foot Syndrome

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Introduction: In the age of systematic prevalence increase of diabetes mellitus (DM) vascular and neuropathic complications decrease life expectancy and quality of life. That state creates serious socioeconomic burden. Knowledge how to properly manage with diabetic foot allow to avoid or delay surgical interventions. Unfortunately, in many patients distal and proximal foot amputations are still necessary. **Aim:** Our aim was to estimate an impact of risk factors leading to foot amputation in patients diagnosed with diabetic foot syndrome. **Material and methods:** Study involved 157 patients admitted at the Outpatient Clinic for Diabetic Foot at the Department of Gastroenterology and Metabolic Diseases, Medical University of Warsaw who were diagnosed with diabetic foot. Clinical evaluation and patients' medical history were used to acquire data with the use of detailed questionnaire. Study group consisted of 59 patients (47 males, mean age 60.5 ± 12.0 years, BMI 29.6 ± 6.1 kg/m², 82.1 % type 2 DM) who underwent amputation due to complications of diabetic foot. Control group included 98 patients (61 males, mean age 63.6 ± 11.2 years, BMI 28.4 ± 4.6 kg/m², 85.6 % type 2 DM). Univariate and multivariate logistic regression statistical analysis was performed. **Results:** Patients who underwent amputation were diagnosed with diabetic foot of neuropathic (45.8 %), vascular (20.3 %) or mixed (33.9 %) etiology. Mean duration of DM in the study group was 16.6 ± 10.9 years and 14.3 ± 8.4 years in the control group. Necessity of amputation in study group occurred after 14.6 ± 10.7 year of DM and after 8.3 ± 10.3 years of insulin therapy. Risk factors of the most impact were male gender (OR 1.60, 95%CI: 1.11-5.08) and overall number of hospitalizations (OR 1.32, 95%CI: 1.08-1.62 for each additional hospitalization). They remained significant after adjusting for other covariates in a multivariate model. Age at diagnosis of DM (OR 0.87, 95%CI: 0.77-0.99 for each additional 5 years) was less important. **Conclusions:** Our observation indicates that men are more prone to develop amputation when diabetic foot syndrome is diagnosed. Higher risk of diabetic foot complications requiring amputation appears also to be associated with the number of hospitalizations. Lower age at DM diagnosis is less important than two above mentioned factors. In conclusion, we suggest that men with diabetic foot need to be treated with utmost care to avoid amputations.