

**Are depression and anxiety risk factors of retarded healing? Results of a 1.5 year prospective observational study**Udovichenko O.<sup>1</sup>, Maximova N.<sup>2</sup>, Suchorutchenko M.<sup>2</sup>, Starostina E.<sup>3</sup><sup>1</sup>South-Western district diabetic foot outpatient clinic, Moscow, Russia <sup>2</sup>First Moscow State Medical University I.M.Sechenov, Russia <sup>3</sup>Moscow Regional Research and Clinical Institute, Russia

**Background and aims:** Previously we have shown that prevalence of depression in patients with diabetic foot (DF) amounts to 33-47%, that of anxiety to 29-58%. There are conflicting data about the impact of DF severity and DM duration on the risk of depression and on poorer of ulcer healing and survival in patients with depression and DF. The aim of our study was to evaluate these possible associations. **Methods:** 150 consecutive patients (median age, 66 (25-91) yrs, male:female 46:54%) with diabetic foot ulcers/wounds completed screening questionnaires on depression (CES-D) and anxiety (HADS). 93% had foot lesions (59% - neuropathic DF, 34% - neuroischemic), 7% - leg ulcers. 87% of foot lesions were ulcers, 8% - post-amputation wounds, 5% - post-operative wounds after other interventions on feet. All patients underwent ulcer treatment in one outpatient DF clinic. 1.5 years after initial assessment, data about ulcer outcome, number of new ulcers, hospitalizations and mortality were assessed by phone interview, done by doctors. 83% of patients were available for follow-up. **Results:** at initial assessment, depression and anxiety were found in 37% patients each. Depression was more prevalent in women than in men (47 vs 26%,  $p=0.014$ ). Prevalence of anxiety among women and men was 42 vs. 32% ( $p>0.05$ ), incl. clinically significant anxiety in 23 vs. 9% ( $p=0.028$ ), respectively. There were no significant associations between depression or anxiety and age, type and duration of DM, insulin therapy, cardiovascular co-morbidities, severity of DF, presence of foot ischemia, ulcer location and duration. Only post-operative (or post-amputation) foot lesions appeared to be a risk factor of depression in women ( $p=0.047$ ) but not in men. Ulcers healed during follow-up in 86% of depressed in 79% of non-depressed patients (NS). There were no correlation between baseline depression or anxiety and healing time, probability of subsequent amputations, hospital admissions, new ulcers incidence and 1.5-yr mortality of men and women. **Conclusions:** Depression and anxiety in patients with DF are not

associated with severity of DF and have no negative impact on the outcomes of ulcer treatment and short-term mortality.