

Outcomes in New-Onset Diabetic Foot Ulcers Stratified by Etiology

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Abstract : Introduction: Foot ulcers and their complications are an important cause of morbidity and mortality in diabetes. Objectives: The present study aims to evaluate the outcomes in terms of need for hospitalization, amputation, healing time and mortality in patients with new-onset diabetic foot ulcers in subgroups stratified by etiology. Methods: A retrospective study based on clinical assessment of patients presenting with new ulcers to a multidisciplinary diabetic foot consult during 2012. Outcomes were determined until September 2014, from hospital registers. Baseline clinical examination was done to classify ulcers as neuropathic, ischemic or neuroischemic. Results: 487 patients with new diabetic foot ulcers were observed; 36%, 15% and 49% of patients had neuropathic, ischemic and neuroischemic ulcers, respectively. For analysis, patients were classified as having predominantly neuropathic (36%) or ischemic foot (64%). The mean age was significantly higher in the group with ischemic foot (70 ± 12 vs 63 ± 12 years; $p < 0.001$), as well as the duration of diabetes (18 ± 10 vs 16 ± 10 years, $p < 0.05$). A history of previous amputation was also significantly higher in this group (24.7% vs 15.6%, $p < 0.05$). The evolution of ischemic ulcers was significantly worse, with a greater need for hospitalization (27.2% vs 18%, $p < 0.05$), amputation (11.5% vs 3.6% $p < 0.05$) mainly major amputation (3% vs. 0%; $p < 0.001$) and higher mean healing time (151 days vs 89 days, $p < 0.05$). The mortality rate at 18 months, was also significantly higher in the ischemic foot group (7.3% vs 1.8%, $p < 0.05$). Conclusions: All types of diabetic foot ulcers are associated with high morbidity and mortality, however, the presence of arterial disease confers a poor prognosis. Diabetic foot can be successfully treated only by the multidisciplinary team which can provide more comprehensive and integrated care.

Keywords : diabetes, foot ulcers, etiology, outcome

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