Abstract

BACKGROUND: Patients with diabetes mellitus are at a higher risk of lower extremity complications as compared to their non-diabetic counterparts. OBJECTIVE: To study risk factors for diabetic foot ulcer disease and stratify patients with diabetes into risk categories for foot ulceration. DESIGN: Cross-sectional descriptive study over five months period. SETTING: Diabetic outpatient clinic, at the Kenyatta National Hospital. SUBJECTS: Two hundred and eighteen ambulatory subjects with diabetes mellitus without active foot lesions. RESULTS: The prevalence of previous foot ulceration was 16% while that of previous amputation was 8%. Neuropathy was present in 42% of the study subjects and was significantly associated with age, male gender, duration of diabetes, random blood sugar, systolic blood pressure and the presence of foot deformity. Peripheral arterial disease was present in 12% and showed significant association with male gender. Foot deformities were observed in 46% of study subjects and were significantly associated with age, male gender, and presence of neuropathy. Subsequently 57% were categorised into IWGDF group 0--no neuropathy, 10% were placed in group 1--neuropathy alone, 16% were put in group 2--neuropathy plus either peripheral arterial disease or foot deformity and 17% were placed in risk group 3--previous foot ulceration/amputation. CONCLUSION: More than one third (33%) of diabetic patients were found to be at high risk for future foot ulceration (IWGDF groups 2 and 3). Published evidence exists that shows improved outcomes with interventions targeting individual patients with diabetes at high-risk of foot ulceration. Long term prospective studies to determine outcomes for the different risk categories should be carried out locally.