Tinea Pedis and Toenail Onychomycosis in Patients with Type 2 Diabetes in Turkey
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Background
Diabetic patients are particularly susceptible to fungal infections because of the problems in the vascular and immunological system. We aimed to determine the prevalence of tinea pedis and/or onychomycosis, the factors predisposing to its development in patients with type 2 diabetes mellitus. Methods
We designated the study groups from the patients admitted to the Internal Medicine Outpatients Unit according to hemoglobin A1C rates; ≥6.5% for diabetic group, ≤5.7% for controls. Various data and laboratory parameters were obtained from patients as follows; age, gender, duration of diabetes, height and weight measurements (for body mass index), serum glucose, and hemoglobin A1C levels and serum lipid profile. All participants’ feet were examined for any sign or symptom of tinea pedis or onychomycosis in both groups. Results
A total of 600 diabetic and 152 non-diabetic subjects were evaluated. The number of patients with onychomycosis and/or tinea pedis were 85 (14.2%) in diabetic group and 9 (5.9%) in control group (p=0.006). The development of onychomycosis/tinea pedis in diabetic patients was significantly related with increasing age and the male gender. However, we could not find any significant correlation between the presence of onychomycosis/tinea pedis and the levels of blood glucose or hemoglobin A1C, duration of diabetes mellitus, body mass index, and serum lipid profile. Conclusions
Fungal skin and nail infections of feet such as tinea pedis and onychomycosis were significantly more frequent in diabetic patients, and the development of onychomycosis/ tinea pedis in these patients was significantly related with increasing age and the male gender.