

RISK FOR FALLS IN PATIENTS WITH TYPE 2 DIABETES

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ABSTRACT

Introduction: Patients with Type 2 Diabetes Mellitus (DM) are considered at high risk for falls due to postural stability problem as a result of DM complications. This study aims to assess dynamic balance function in adults with type 2 diabetes and to compare their findings with healthy age-matched control group.

Methods: This is an experimental cross-sectional study, using purposive sampling method. Thirteen diabetic patients (mean age: 41.6±12.3 years) and 30 age-matched healthy controls (mean age: 35.3±10.0 years) participated in the study. Dynamic stability was examined using Time Up and Go (TUG) and Functional Gait Assessment (FGA).

Results: TUG scores were significantly higher (i.e. worse) in patients with type 2 DM compared to the healthy control. The average TUG scores (mean=12.07s) of patients indicated they are at high risks for fall. Difference between groups for the FGA scores revealed insignificant finding. Duration of diabetic was significantly correlated with FGA scores but not TUG.

Conclusions: Patients with type 2 DM walked significantly slower than healthy controls. Patients employed a compensatory mechanism (cautious gait) to reduce instability during gait. However, this mechanism may not a safe strategy as it increased risks of fall in patients.

Keywords: Type 2 Diabetes, risk for falls, dynamic stability, time up and go test (TUG), functional gait assessment (FGA), adults

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