Abstract

Introduction: Parkinson’s disease (PD) patients have several changes in postural control and gait. However, the gait adaptations of these subjects due to the environmental conditions (i.e., compliant surface) are not well known. Objective: To verify the kinematic pattern of gait of PD patients when walking on compliant surface. Method: Hip, knee and ankle joint angles for the sagittal plane were compared in three different conditions: walking on a stable surface, on an unstable surface and again on the stable surface. Gait velocity and stride length were also assessed. Results: Participants increased the amplitudes of ankle, knee and hip joint angles and reduced the velocity when walking on unstable surface. Conclusion: Patients with PD reduced their gait speed and increased the lower limbs range of motion when walking on compliant surface. After exposure, there was an increase of stride length on the stable surface.

Keywords

Environment, Gait, Kinematics, Parkinson disease.