

IS THERE A LONG-LASTING EFFECT OF ROBOTIC-ASSISTED GAIT TRAINING IN PARKINSON'S DISEASE? Poster

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Gait disorders represent one of the most disabling motor features of Parkinson's Disease (PD). In the last 10 years, the interest for automated robotic devices for gait training in PD patients has grown. Objective: to evaluate the efficacy of a Robotic-Assisted Gait Training (RAGT) program compared to an exercise program specific for PD patients.

10 patients with mild stage of PD (HY 2-2.5) were randomly assigned to receive a RAGT using Lokomat device or a conventional gait training lasting 30-minutes in addition to an exercise program specific for PD patients lasting 60 minutes. Participants were evaluated before (T0), at the end of treatment (T4), and 12 weeks after the end of treatment (T16). Outcomes: 10m walking test, TT and UPDRS-III.

: ANOVA for repeated measures was performed to examine the effects of interventions within groups.

No baseline differences were observed between the groups. At T4, the experimental group showed a significant improvement in the 10-metres walking test (TWT) 0.2 m/s against the control group ($P \leq 0.05$). UPDRS III, also, improved in the experimental group ($P = 0.013$) and TT balance. At T16 we observed the loss of all the clinical improvement obtained at the end of treatment in both groups.

RAGT improves balance and gait ability in PD patients more than a conventional physical therapy specific for PD with an improvement lasting less than 3 months.

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