New


INTRODUCTION:
The aim of this pilot randomized controlled trial was to evaluate the effects of treadmill training on cognitive and motor performance in patients with Parkinson’s disease (PD).

METHODS:
Seventeen persons with mild to moderate PD were enrolled. Nine patients were allocated to the Intervention group and received twelve 45-minute sessions of treadmill training: one session a day, three days a week, for four consecutive weeks. Eight patients were allocated to the Control group; these patients did not undergo physical training but were required to have regular social interactions, following a specific lifestyle program. All the patients were evaluated at baseline and one month later. The primary outcome measures were the Frontal Assessment Battery-Italian version (FAB-it) and the 6-minute walking test (6MWT).

RESULTS:
At the one month evaluation significant differences were found between the groups in their performance on the FAB-it (p=0.005) and the 6MWT (p=0.018).

CONCLUSION:
Our findings support the hypothesis that treadmill training might effectively improve cognitive and motor features in patients with PD.

CONCLUSIONS and CLINICAL IMPLICATIONS:
Preliminary findings indicate that aerobic exercise using a treadmill may lead to improvements in both cognitive and motor features in people with mild to moderate Parkinson disease and no dementia.