

DDSIG New and Noteworthy

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New

[Effects of 2 Years of Exercise on Gait Impairment in People With Parkinson Disease: The PRET-PD Randomized Trial.](#)

Rafferty MR, Prodoehl J, Robichaud JA, et al. *Journal of Neurologic Physical Therapy*. 2017;41:21-30.

INTRODUCTION: This study presents a secondary analysis from the Progressive Resistance Exercise Training in Parkinson Disease (PRET-PD) trial investigating the effects of progressive resistance exercise (PRE) and a Parkinson disease (PD)-specific multimodal exercise program, modified Fitness Counts (mFC), on spatial, temporal, and stability-related gait impairments in people with PD.

METHODS: Forty-eight people with PD were randomized to participate in PRE or mFC 2 times a week for 24 months; 38 completed the study. Gait velocity, stride length, cadence, and double-support time were measured under 4 walking conditions (off-/on-medication, comfortable/fast speed). Ankle strength was also measured off-/on-medication. Twenty-four healthy controls provided comparison data at onetime point. weeks of treatment consisted of daily direct current stimulation application

for 25 minutes during physical therapy. Long-term effects of treatment were evaluated on clinical, neuropsychological, and motor task performance at 3-month follow-up.

RESULTS: At 24 months, there were no significant differences between exercise groups.

Both groups improved fast gait velocity off-medication, cadence in all conditions, and plantarflexion strength off-/on-medication. Both groups with PD had more gait measures that approximated the healthy controls at 24 months than at baseline. Plantarflexion strength was significantly associated with gait velocity and stride length in people with PD at baseline and 24 months, but changes in strength were not associated with changes in gait.

CONCLUSION: Twenty-four months of PRE and mFC were associated with improved off-medication fast gait velocity and improved cadence in all conditions, which is important because temporal gait measures can be resistant to medications.

Noteworthy



CSM Meetings:

- Myelin Melter, Friday 2/23 6:30 pm - 9:00 pm
- DDSIG Breakfast, Saturday 2/24 6:45 am - 7:45 am

CSM Educational Highlights:

[Platform Session I](#) - Thurs 2/22 11 am - 1 pm

[Dual-Task Gait Training: If, Who, When, and How?](#), Thurs 2/22 3-5 pm

[High-Intensity Aerobic Exercise Parkinson Disease](#), Fri 2/23 8-10 am

[Pain in Neurodegenerative Diseases](#), Fri 2/23 11 am - 1 pm

[Multiple Sclerosis in the Underserved](#): Sat 2/24 1-3 pm

Become an officer with the DDSIG.

Elections this spring for Secretary and Nominating Committee. Questions?

Contact Parm Padgett at parmpadgett@gmail.com

Here is the link to run:

<http://www.neuropt.org/members/nomination-forms-2018>

Volunteer with the DDSIG!

https://docs.google.com/forms/d/e/1FAIpQLScijsKHje902JR_DWqNK3eOtsl7JPdWQOBll1CD2hYR1-hw/viewform

Or email: neuroiddsig@gmail.com

Link to article:

<https://www.ncbi.nlm.nih.gov/pubmed/27977518>

CONCLUSIONS and CLINICAL IMPLICATIONS: This study highlights long duration in a Parkinson's disease exercise program showed an improvement in off-medication gait velocity and cadence. Improvements in plantarflexion strength did not result in improvements in gait