

DDSIG New and Noteworthy

APTA Neurology Section

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New

By Stephanie Semerda

Mild cognitive impairment in Parkinson's disease is improved by transcranial direct current stimulation combined with physical therapy.

Manenti R, Brambilla M, Benussi A, et al. Movement Disorders. 2016;31:715-724.

INTRODUCTION:

Recent studies in PD patients have shown that repeated sessions of anodal tDCS (AtDCS) led to an increased performance in both cognitive and motor tasks with stable effects at 1-month or 3-month follow-up. Remarkably, no studies have explored the long-term effects of repeated sessions of tDCS when combined with physical therapy in PD patients.

METHODS:

20 patients with PD were assigned to 1 of 2 study groups: group 1, anodal transcranial direct current stimulation plus physical therapy (n = 10) or group 2, placebo transcranial direct current stimulation plus physical therapy (n = 10). The 2 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:

An improvement in motor abilities and a reduction of depressive symptoms were observed in both groups after the end of treatment and at 3-month follow-up. The Parkinson's Disease Cognitive Rating Scale and verbal fluency test performances increased only in the anodal direct current stimulation group with a stable effect at follow-up.

CONCLUSION:

The application of anodal transcranial direct current stimulation may be a relevant tool to improve cognitive abilities in PD and might be a novel therapeutic strategy for PD patients with mild cognitive impairment.

*Contributed by Stephanie Semerda
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Noteworthy

CSM:

PENCIL US IN! We need volunteers for set up and break down at the Myelin Melter. Volunteer sign-up link will be sent in January.

Myelin Melter Friday, February 23, 2018

Time: 6:30 PM - 9:00 PM

Location: Hilton

Riverside Grand Ballroom CD

Continental Breakfast Saturday (FREE), February 24, 2018

Time: 6:45 AM - 7:45 AM

Location: Hilton

Riverside Grand Salon B

We will have thumb drives and water bottles at both events.

Volunteer award to be announced.

Volunteer with the DDSIG!

https://docs.google.com/forms/d/e/1FAIpQLScijsSKHje902JR_DWqNK3eOtsl7JPdWQQBl1CD2hYR1-hw/viewform

Or email:

neuroddsig@gmail.com

Link to article:

<https://www.ncbi.nlm.nih.gov/pubmed/26880536>

CONCLUSIONS and CLINICAL IMPLICATIONS: This study highlights transcranial deep brain stimulation in conjunction with physical therapy in patient's with Parkinson's disease may assist with designing new rehabilitation strategies for persons with Parkinson's disease.