

Abstract
Poster Session B

Thursday, November 14, 2019 11:30 am – 1:00 pm

NEUROLOGICAL AND NEUROPSYCHIATRIC DISORDERS: OTHER

B-25

Osteopathic Manipulative Treatment Improves Non-Motor Symptoms in Parkinson's Disease: A Preliminary Study

Whiteley N, King H, Cabrera Tuazon A, Pluim C, Nakhla M, Mills P, Schiehsler D

Parkinson's disease (PD) is a neurodegenerative disease characterized by debilitating motor and non-motor symptoms. Osteopathic Manipulative Treatment (OMT) has been shown to alleviate stress, mood, and sleep in musculoskeletal conditions and older adults, as well as improve gait and balance in PD and elderly patients, respectively. Research on the efficacy of OMT in reducing PD symptoms is lacking. Therefore, the aim of this preliminary study was to evaluate changes in mood, cognitive, and motor symptoms in a sample of non-demented PD patients following 6-weeks of OMT. Sixteen non-demented individuals with PD received 6 weekly 30-minute OMT by an osteopathic physician. Participants were administered measures of cognition (Parkinson's Disease-Cognitive Rating Scale; PD-CRS), anxiety (Geriatric Anxiety Inventory; GAI), sleep quality (Pittsburgh Sleep Quality Index; PSQI), stress (Perceived Stress Scale; PSS), and motor function (Unified Parkinson's Disease Rating Scale-Part 3) before and after treatment. Paired-samples t-tests were used to examine changes in symptoms pre and post-OMT. Results revealed significant improvement in cognition (PD-CRS; $p = .015$) and perceived stress (PSS; $p = .02$) from pre- to post-intervention. There was a trend towards improvement in anxiety (GAI; $p = .064$) and sleep quality (PSQI; $p = .08$). There was no change in motor symptoms from pre- to post-OMT ($p = .56$). Findings suggest that OMT may improve non-motor symptoms – particularly cognition and stress - in PD. Future research is needed to determine if these effects can be replicated within a randomized-control-trial and maintained over time. With further research, OMT may prove to be a beneficial non-invasive treatment for non-motor symptoms in PD.