Book of Abstracts



WORLD CONGRESS ON PARKINSON'S DISEASE AND RELATED DISORDERS

CHICAGO, USA

2023

13 – 16 May



Conclusions: We did not observe a significant improvement. This can be due to the low sensitivity of the test metrics in mild to moderate PD patients, the small study population, and lower adherence to training in some of the patients. The study is still ongoing, and the bigger study population may allow us to assess the impact of training with greater accuracy.

Grant support: APVV 20-0466, VEGA 2/0076/22, COST DEPASS

P 104

Impact of Covid-19 infection on the course of Parkinson's disease

<u>B. Muminov</u>¹, R. Matmurodov¹, R. Juraev¹, K. Khalimova¹
¹Tashkent Medical Academy, Tashkent, Uzbekistan

Background: The complete information about the relationship between the infection of Covid-19 and Parkinson's disease is not known. Patients with Covid-19 have been shown to have non-motor cognitive impairments, and worsening levels of depression and anxiety.

The purpose of the study: To study the investigating the impact of Covid-19 infection on non-motor impairment in Parkinson's disease.

Methods: 34 patients with PD (17 men and 17 women) were enrolled for the study. The average age of the patients was 56-78 years, with an average of 67,0±6.4 years. The average duration of the disease is 5.6±3.6 years. Special neuropsychological tests were conducted. All of these patients were screned before and after Covid-19 infection. Neuropsychological indicators were compared in the dynamics of the period after the transfer of Covid-19 infection.

Results: In 34 patients, 61.7% had depression and 64.7% had anxiety before Covid-19 infection. When analyzing the level of cognitive impairment, 82.3% of patients had cognitive impairment, 78.5% of patients had pre-dementia cognitive impairment, and 21.5% of patients had mild dementia symptoms. When 34 patients were re-examined after Covid-19 infection, 91.1% had depression and 94.1% had anxiety. 97% of patients had cognitive impairment, 61.7% had pre-dementia cognitive impairment, and 38.3% had dementia symptoms. Constipation was observed in 52.9% of patients before infection and in 76.4% of patients after Covid-19 infection. 91.1% of the above disorders were strongly manifested in patients aged 60-78 years. When compared with the post-Covid-19 infection period, depression and anxiety predominated in the early stages, while cognitive impairment and constipation deepened over time.

Conclusions: Covid-19 infection strongly affects non-motor disorders in Parkinson's disease, increases depression and anxiety scores, deepens cognitive impairment, and accelerates the development of constipation.

P_109

Visualization of the MDS-UPDRS results

<u>J. Hixson</u>¹, J. Quintero¹, A. Guiliani¹, T. Yamasaki¹, G. Gerhardt¹, J. Slevin¹, C. van Horne¹ University of Kentucky, Neurosurgery, Lexington, United States

Background: The MDS-UPDRS is the most widely used assessment for Parkinson's disease. It captures disease symptom severity with 65 individually scored items divided into four parts. Each part produces a subtotal score; the full scale has a total score. Comparing scores for individual symptoms within a given patient can be cumbersome and challenging.

Methods: UPDRS scores obtained from routine clinical evaluations were entered into spreadsheet software that had been formatted to visually depict symptoms and their severity. Parts I, II, and IV of the assessment were illustrated as three individual inline columns maintaining the item arrangement for each part. The motor symptoms in Part III were grouped by anatomical location (i.e. right arm), and secondarily by symptom type (i.e. tremor), resulting in a Vitruvian Man-style figure. The scoring system of the UPDRS was maintained with each number 0-4 being color coded to further facilitate interpretation of symptom severity.

Results: Three identical Part III visualizations are present. Two depict two clinical states (i.e. OFF or ON medication) while a third illustrates changes observed between the two clinical states. The utility of this visualization allows for a detailed picture of the individuality of experienced symptoms associated with PD. We have routinely used it in our clinic over the last three years in over 200 patients to aid in communication among the clinical care team and to communicate with patients and caregivers. It does currently require manual entry of the data into the spreadsheet and manual transfer to the electronic medical record.

Conclusions: This visualization tool for MDS-UPDRS data is amenable to use in the clinic and maintains the integrity and validity of the data and exam. The tool has proved to be clinically useful in identifying the most bothersome symptoms and enabling concise interpretation with patients, families, and clinical providers. Disclosure, CVH, JH, JEQ have a financial interest in the development of the visualization tool. Other authors declare no competing interests.