

145. SLEEP DISTURBANCES IN PARKINSON'S DISEASE

Author: **Bwirat Khaled**

Scientific adviser: Marina Sangheli, MD, PhD, Associate professor, Department of Neurology, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

Introduction. Sleep disorders are among one of the earliest and most common non-motor symptoms of Parkinson's disease (PD). The nature of sleep is considered to be the major cause of lack of satisfaction of life quality in patients with Parkinson's disease. Despite well-known sleep disorders in PD, sleep has been a rare and mostly neglected topic in PD research. The prevalence of sleep disturbances in patients with PD, range from 65% up to 95%, which point that sleep disorders in PD patients are not rare and require increased awareness from clinician and researchers.

Aim of the study. Evaluation of sleep disorders in PD patients and the influence of PD stage, medications, pain, anxiety and depression on PD patients sleep quality.

Materials and methods. Forty PD patients were included in the study. Clinical demographic data were recorded. Disease stage was evaluated by the Hoehn and Yahr rating scale, sleep quality by Pittsburgh Sleep Quality Index (PSQI), sleep disturbances by the Parkinson's disease sleep scale (PDSS-2 scale), excessive daytime sleepiness was identified by the Epworth Sleepiness Scale (ESS). And depressive and anxiety symptoms by the Hospital Anxiety and Depression Scale (HADS). Control group of forty participants age healthy matched also completed the PDSS-2 scale.

Results. 70% of the patients have PSQI score more than 5 which indicate poor sleep quality. The result show that PD patients with reported pain have mean PSQI score 9.52 in comparison to PD patients without pain with a mean score 8.24. The mean PSQI score for those who got HADS anxiety subscale more than 10 was 8.79 where those who got less than 10 have a mean PSQI mean score 8.89. For patients who got in HADS depression subscale a score more than 10, the mean PSQI score was 9.94 and for those who got a score less than 10 have PSQI score 8.464. The mean PDSS-2 score for PD patients was 95.43 ± 14.57 and for matched age healthy control group was 123 ± 16.25 . 32.5 of the PD patients have EDS. The mean score for PDSS tremor dominant PD patients was 92.46 where the mean score for rigidity dominant was 98.66. The mean ESS score for tremor dominant PD patients was 6.77 and for those with rigidity dominant the mean score was 6.39. There is no significant difference in PDSS mean score between the stage 1 and 2 but if it compared to stages 3,4 and 5 there is significant difference.

Conclusions. PD patients have poorer sleep quality than matched age healthy control group. Unlike medication type and anxiety there was significant correlation with the disease stage, pain, depression and tremor dominant patients. There was a correlation with ESD and the disease stage.

Key words: Parkinson's disease, sleep disturbances.