EFFECT OF A SINGLE DOSE OF METHADONE ON SACCADIC REFIXATIONS IN OPIOID ADDICTED SUBJECTS WITH HIV (+) AND HIV (-)

J. Feit^{1,2}, E. Nowińska¹, K. Pasgreta¹, W. Lasoń³, P. Walecki³, E.J. Gorzelańczyk^{1,4,5}

¹Department of Theoretical Basis of Bio-Medical Sciences and Medical Informatics, Collegium Medicum UMK, ²Non-Public Health Care Center Sue Ryder Home, Bydgoszcz, ³Faculty of Medicine, Jagiellonian University, Medical College, Krakow, ⁴Institute of Psychology, Polish Academy of Sciences, Warszawa, ⁵Institute of Philosophy, Kazimierz Wielki University, Bydgoszcz, Poland

Introduction: Eye movements are closely related to cognitive and emotional functions. Information of saccadic dynamics during certain tasks may indicate disorders of mental functions that can help to explain the neurobiology of sensory-motor systems and be useful in neuropsychiatric diagnosis.

Aims/objectives: This study aims to assess the impact of a therapeutic dose of methadone on eye movements (saccades) in opioid addicted subjects with HIV(+) and HIV(-).

Methods: Sixty patients (29 patients with HIV(-) and 31 of HIV(+)) from the substitution program were examined. The examination was conducted twice: before and 1,5 hours after the administration of a therapeutic dose of methadone. Performed Latency Test (LT) with saccadometr diagnostic system.

Results: Mean duration of latency measured by LT Test after the administration of a therapeutic dose of methadone increases significantly in HIV(-) subjects but the mean peak velocity decrease in the study group. Mean peak velocity latency in HIV(+) subjects is not statistically significant. Mean duration and amplitude of latency after the administration of a therapeutic dose of methadone is a statistically significant in opioid addicted subjects with HIV(+). It was found that the mean peak velocity before the administration of a therapeutic dose of methadone was statistically significantly different in HIV(-) subjects as compared to HIV(+) ones.

Conclusion: The increase of saccadic refixation parameters values in opioid-addicted subjects after the administration of a therapeutic dose of methadone was observed.