P-1028 - THE PARAMETERS OF SACCADIC EYE MOVEMENTS IN INDIVIDUALS WITH ALZHEIMER´S DISEASE COMPARED WITH THOSE OF HEALTHY SUBJECTS

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Introduction: There are abnormalities in eye movements in individuals with Alzheimer´s disease, which are related to oculomotor frontal-subcortical circuit dysfunctions.

Objectives and aims: The aim of the study is to compare the parameters of saccadic eye movements in individuals with Alzheimer´s disease with those in older adults without dementia.

Methods: 31 individuals with mild and intermediate Alzheimer´s dementia (MMSE> 13) (26 women, mean age 76.8 ± 6.41 and 5 men, mean age 79.1 ± 5.21) and 30 individuals without symptoms of dementia (matched for age) were examined.

The parameters of saccadic eye movements were measured with the use of Saccadometer Advanced. Two experiments were performed: Latency Trials (LAT) and Reflexive with Gap (RXG). Saccadic latency [ms], the reaction time [ms] and the number of executed saccades were measured.

Results:

LAT:

Statistically significant differences in the number of saccades ($\alpha = 0.05$, $p = 0.000024$) and in average latency [ms] ($\alpha = 0.05$, $p = 0.039$) between the individuals with AD and the healthy ones were found.

RXG:

Statistically significant differences were found in all the variables tested: number of executed saccades ($\alpha = 0.05$, $p = 0.0265$), average latency [ms] ($\alpha = 0.05$, $p = 0.043$) and average duration [ms] ($\alpha = 0.05$, $p = 0.000035$) between persons from the control group and those from the experimental group.

Conclusions: It was found that the level of oculomotor efficiency in mild and intermediate Alzheimer´s disease is significantly lower in relation to older people without dementia.