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RISK SCORING FOR ALZHEIMER'S DISEASE IN INDIVIDUALS WITH FAMILY HISTORY

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Introduction: The insight in the ethiopathogenesis of Alzheimer's disease(AD) suggests a slowly developing neurodegenerative process that starts 10 to 20 years before the clinical manifestation. Preventing or slowing the process of neuronal damage would be the state of the art in neuroscience, but the first step is to identify individuals at risk, diagnose AD in the preclinical stage, develop preventive strategies and start treatment in the early disease course.

Objectives: Developing a model for estimating a predictive risk score for AD in individuals with family history for AD and .

Material and Methods: A battery of biochemical test for identifying LPL deficiency, serological biomarkers(alfa 2 macroglobulin, homocystein, complement factor H, interleukin-6) , APO E genotyping and neuropsychological tests (Mini Mental State Examination-MMSE, Clinical Dementia Rating, and the novel Syndrome Kurz test) are performed in 50 individuals with family history for AD.

Results: The early stage ongoing research that our team is performing, gives optimistic insight in the first results by combining the presence of the examined serological biomarkers, the neuropsychological tests results and ApoE genotyping, we estimate the risk score for developing AD.

Conclusion: Till now a list of potential blood biomarkers has been suggested but none of them has shown to be sensitive, nor specific in accurate preclinical AD diagnosing. We believe that by combing these tests, a risk score for individuals with family history of AD would be estimated, so that a prospective approach and preventive strategies could be developed.