

Anomalously phosphorylated tau and A β fragments in the CSF correlates with cognitive impairment in MCI subjects

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Alzheimer's disease (AD) is a neurodegenerative disorder characterized by the presence of extracellular amyloid deposits, consisting largely of A β peptide and the presence of intraneuronal aggregates of neurofibrillary tangles formed by tau. Development of cerebrospinal fluid (CSF) biomarkers has become a rapidly growing research field, considering the need for diagnostic tools for AD, thus allowing therapeutic compounds to have the greatest potential for being effective. We have focused on the relationships between critical biomarkers such as tau and A β in the CSF and the cognitive impairment of patients, as assessed by a battery of neuropsychological tests derived from CDR and CERAD, of value in the evaluation of AD patients. As part of a longitudinal study, we analyzed by ELISA and Western blots the levels and molecular patterns of hyperphosphorylated tau in the CSF of three different groups of patients: AD patients between 69- and 73-years-old, a group characterized with mild cognit