MEDIAL TEMPORAL LOBE ATROPHY IN POSTSTROKE COGNITIVE IMPAIRMENT: 2 YEARS FOLLOW-UP STUDY

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Aim: The objectives of this study were to evaluate the delayed change in cognition in poststroke patients and its relationship to the medial temporal lobe (MTL) atrophy.

Methods: Eighty-five first-ever stroke inpatients (mean age 65.6±5.6) without previous cognitive complaints were prospectively evaluated with comprehensive neuropsychological battery at 5-th day, 1-st, 6-th, 12-th and 24-th month. A wide range of clinical, radiological, and neuropsychological variables were examined.

Results: Our results showed that among all neuropsychological measures, only IST test at 2-year follow-up showed significant decline reaching the baseline level impairments in comparison with the results at 12-th month. On the other hand, MTL atrophy showed its high impact on the performance on all neuropsychological tests, even after 2 years of stroke. In addition, the MTL atrophy increased significantly in two years after stroke compared with baseline.

Conclusion: These results enriched our previous neuropsychological and neuroimaging longitudinal findings after stroke. Moreover, the data strengthened the important role of the initial assessment of MTL atrophy, and follow-up IST examinations as a neuropsychological quick, easy and reliable tool for delayed poststroke cognitive impairment.