

SHIFT IN SUBTYPES OF MILD COGNITIVE IMPAIRMENT BY NEUROPSYCHOLOGICAL ASSESSMENT

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Background: Mild cognitive impairment is a heterogeneous condition with a variety of clinical outcomes and they are at risk to develop Alzheimer's disease or in the pre-clinical stage of the other dementia

Object: The main aim of this study is to identify subtypes of MCI by neuropsychological assessment and shift in subtype of MCI after 6months.

Method: We recruited 120 MCI patients who completed neuropsychological assessment according to Petersen's clinical criteria. We classified them into 4 subtypes of MCI (amnestic single domain, amnestic multidomain, non-amnestic single domain, non-amnestic multidomain) At 24-week follow up We assessed neuropsychological test and identified shift in subtype of MCI.

Result: The 83 patients with MCI at 24-week follow-up were classified into four subtypes. The most frequent subtype is amnestic multi-domain MCI. Each frequency of MCI subtypes was as follows: amnestic single domain (n=21, 25.3%), amnestic-multidomain (n=53, 63.9%), non-amnestic single domain (n=5, 6.0%) and non-amnestic multidomain (n=4, 4.8%). At 24-week follow-up, conversion rate to Alzheimer's disease was 2.4% (n=2) from a subtype of amnestic multi-domain MCI. The frequency of MCI subtypes was changed into 25.5% of amnestic single domain, 42.1% of amnestic multidomain, 16.9% of nonamnestic single domain, 7.2% of non-amnestic multidomain and normal cognition of 6.0%.

Conclusion: At 24-week follow-up, conversion rate to Alzheimer's disease was 2.4% (n=2) from a subtype of amnestic multi-domain MCI. Our study shows that the most frequent subtype of MCI was amnestic multi-domain MCI and this subtype has a higher tendency of conversion to Alzheimer's disease.