NeeuroCycle to be an accessible, safe, and cost-effective way for older adults to maintain or improve cognitive health, which is beneficial for ageing societies.

P18: Differences in cognitive decline in amnestic mild cognitive impairment due to primary age-related tauopathy and Alzheimer's disease

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Objectives: Primary age-related tauopathy (PART) is associated with cognitive impairment, characterized by the presence of neurofibrillary tangles composed of tau protein, independent of amyloid plaque deposition. In this study, we examined the differences in neuropsychological assessments between PART and Alzheimer's disease (AD) over a three-year follow-up period in patients with amnestic mild cognitive impairment (amnestic MCI).

Methods: Ten patients (mean age = 75.9; SD = 7.0; Global Clinical Dementia Rating Scale = 0 or 0.5) were recruited from Memory Clinic at Keio University Hospital. They were classified into two groups of five patients with amnestic MCI or subjective cognitive impairment due to either PART (amyloid-/tau+) or AD (amyloid+/tau+) based on the results of [18 F]PM-PBB3 and [18F]Florbetaben Positron Emission Tomography imaging scanning. A battery of neuropsychological tests: Mini-Mental State Examination (MMSE), Alzheimer's Disease Assessment Scale (ADAS), Logical memory test of Wechsler Memory Scale–Revised, Word fluency, Trail Making Test (TMT), was administered at baseline (the first visit) and after three years.

Results: All patients remained as MCI (Global CDR = 0.5) at three-year follow-up. Although ADAS score was deteriorated more in AD than PART group at three-year follow-up ($p < 0.05$), PART and AD groups did not differ in overall cognitive abilities including memory. However, in PART group, the TMT A & B completion time tended to be prolonged compared to AD group ($p = 0.98$). On the other hand, TMT B/A indicated as executive function was indifferent in both groups.

Conclusions: Patterns of cognitive decline trajectory differed between PART and AD in amnestic MCI, suggesting a difference in the neuropathological course leading to progression to AD. PART may show greater decline in visuospatial attention compared to AD. It implies that PART has distinct neuropathological and clinical features compared to AD.

P19: Design of ADEPT-2, a phase 3, parallel group study to evaluate xanomeline and trospium as a treatment for psychosis associated with Alzheimer's disease dementia

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Background: Psychosis represents a major unmet medical need in patients with Alzheimer's disease (AD) dementia. With no approved medications for AD dementia psychosis (ADP), current treatment relies on off-label uses of antipsychotics with limited efficacy and significant safety concerns. Xanomeline is an M1/M4 preferring

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