of this scale in MCI patients both in Brazil and worldwide. Methods: 55 older adults with MCI (Peterson’s criteria) were assessed using the COPM. Test-retest was accessed in 27 MCI patients. An occupational therapist made the COPM interview and repeated the test 2 weeks later. The reliability of inter-rater agreement was accessed in the remaining 28 patients, which were interviewed with COPM by two different occupational therapists in the same day. Pearson’s correlation test was used in the analysis. Results: Correlation of the problems identified (ex.: climbing stairs, paying bills, etc) in the performance of daily activities in the test-retest was 0.74 (p < 0.001) and for inter-rater agreement was 0.72 (p < 0.001). For the problems identified a score was given for the level of performance. In the test-retest the correlation of this score was 0.09 (p = 0.776) and in the inter-rater evaluation it was 0.66 (p < 0.001). A score of satisfaction with the performance is also given through the COPM and in the test-retest the correlation was -0.11 (p = 0.715) and in the inter-rater it was 0.67 (p < 0.001). Conclusions: Results showed that the COPM has generally a good reliability both in the test-retest and in the inter-rater agreement for problems identified. Less consistent results were found to the performance perceived and level of satisfaction with the problems in the test-retest, perhaps because it depends on more subjective parameters and a longer period (2 weeks) has passed between interviews. The COPM can be used to evaluate problems in the performance of daily activities in MCI elderly patients.

**PI-143**

**THE MONTREAL COGNITIVE ASSESSMENT (MOCA): VALIDATION OF ALTERNATE FORMS AND NEW RECOMMENDATIONS FOR EDUCATION CORRECTIONS**

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Background: The Montreal Cognitive Assessment (MoCA) is a popular cognitive screening test designed to detect mild cognitive impairment (MCI) in older adults (Nasreddine et al., 2005). It was originally validated in a normative sample with a mean education of 13.3 years using a cutoff score of 26. Our objective was to obtain normative data in a sample with 12 years or less of education, and to develop alternate forms to facilitate its use in repeated testing. Methods: Ninety-six healthy participants without cognitive problems were tested on the original MoCA and a neuropsychological battery. This sample was combined with lower-education participants from the initial validation study. Fifty-five participants were excluded, mainly due to poor neuropsychological performance (score = 1.5 SD below the mean on 1+ measure). The final sample was 70 participants. Two alternate MoCA forms were developed by replacing original items with new exemplars. The original and two new forms were administered one month apart in randomized order to 32 normal elderly controls, 30 patients with MCI, and 21 patients with Alzheimer disease. Results: 1. Revised education corrections of +1 point for 10-12 years of education (n = 52) and +2 points for 9-9 years of education (n = 27) are suggested. Sensitivity for detecting MCI/AD were 90/100% and specificity 69.2% for 10-12 years of education, and 87.5/100% sensitivity, 74.1% specificity for 9-9 years of education. 2. Repeated measures ANOVA on the three MoCA forms revealed the following: total scores for the NECs and AD’s on all three versions were within 0.8 points of each other, with no significant differences between the versions. Total scores for the MCI showed a significant but small 1.3 point difference between MoCA 1 and MoCA3. Conclusions: The MoCA has lower specificity for detecting MCI in lower education samples, highlighting the challenge of cognitive screening in older adults with lower education but, overall, retains its excellent psychometric properties and sensitivity as a screening tool for MCI and mild AD. The three forms of the MoCA yield equivalent total scores and discriminate MCI patients from controls and AD patients. The three forms are suitable for situations requiring repeated cognitive testing.

**PI-144**

**INTEGRATION OF COGNITIVE IMPAIRMENTS AND WHITE MATTER HYPERINTENSITIES INTO A 12-CELL DIAGNOSTIC MATRIX SYSTEM: ANALYSIS OF 3,966 SUBJECTS FROM THE CREDOS STUDY**

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Background: Mild cognitive impairment (MCI), especially amnestic type (aMCI), is known to be a preclinical stage of Alzheimer’s disease (AD), as is subcortical vascular MCI (svMCI) a prodromal stage of subcortical vascular dementia (VaD). Clinically, it is difficult to draw a line between AD versus VaD and between aMCI versus svMCI. Rather, these conditions should be viewed as being in the same spectrum with AD or aMCI on one end of the continuum and svVaD or svMCI on the other end of the continuum. The goal of this study was to introduce a new method of integrating these spectrum disorders into so-called “12-cell Diagnostic Matrix” and to report the demographic and clinical characteristics of subjects from each cell. Methods: The Clinical Research for Dementia of South Korea (CREDOS) recruited 4,228 subjects between 2005 and January 30, 2010 from 56 hospitals, who underwent the identical evaluation protocol including neuropsychological tests and MRI. Subjects were to have one of the five diagnostic categories: no cognitive impairment (NCI), aMCI, svMCI, AD, or SvAD. However, rather than the AD/SvAD or aMCI/svMCI dichotomy, we rearranged the subjects into a 12 cell matrix that consisted of four cognition levels (NCI, MCI, mild to moderate dementia, and severe dementia) and three white matter ischemia burdens on MRI (minimal, moderate, and severe) (figure 1). Results: About half of the subjects (N = 2,114; 50.0%) had mild to moderate dementia, of which the ischemia severity distribution were 49.7:34.1:6.2: (%) mild: moderate: severe. For patients with MCI (N = 1,566; 37.0%), the ischemia severity distribution was 65.5%, 26.8%, and 7.7%, respectively. The mean age was 71.9 ± 8.2 years. There was a female-to-male ratio 7:3 and an average of 7.0 ± 5.3 years of education (table 1). Conclusions: The CREDOS study which consisted of subjects with normal cognition, patients with aMCI versus svMCI, AD versus SvAD, and those within the grey zone between them will provide a comprehensive perspective of MCI and dementia and serve as a model for future cross-sectional and longitudinal studies.

**PI-145**

**A STUDY ON THE CLINICAL PROFILE AND SOCIO-CULTURAL FACTORS INFLUENCING DIAGNOSIS OF MILD COGNITIVE IMPAIRMENT AND DEMENTIA FROM A MEMORY CLINIC IN URBAN SOUTH INDIA**

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Background: Characterization of mild cognitive impairment (MCI) and dementia subtypes has become increasingly important for treatment and prognosis. The geographical location and socio-cultural...
factors influence the proportion of dementia subtypes. Dementia in India is expected to reach epidemic proportions in the next two decades but studies on dementia are few. We studied patients attending a memory clinic in a private hospital in South India to describe the clinical profile and compare the socio-cultural factors influencing diagnosis and dementia care in this population with studies from developed countries. Methods: Consecutive patients attending the memory clinic at Manipal hospital, Bangalore over three years were included. Socio-demographic information including income, education and linguistic background was collected. All patients underwent detailed neurological evaluation, cognitive testing, blood tests and neuroimaging. The diagnosis of MCI, dementia and the different subtypes was based on standard criteria. Results: The mean age at presentation was 65.8(9.0) years, range 40-87 years. There were 127 men and 93 women. Of the total 220 patients, MCI was diagnosed in 57 (25.9%), Alzheimer’s disease (AD) in 62 (28.1%), vascular dementia (VaD) in 38 (17.3%), and mixed dementia in 4 patients. 37 (16.8%) patients were diagnosed as frontotemporal lobar degeneration (FTD) and its variants. Other degenerative dementias were seen in 13 and miscellaneous causes in 8 patients. One patient did not appear to have any cognitive impairment. Majority of the patients (80.4%) were bilingual or multilingual and 10 (4.9%) patients were illiterate. VaD was more common in men (3:1) and AD in women (1.5:1). Majority of the MCI patients had depression (54.4%) and seven patients converted to MCI over 18-months demonstrated significantly greater decline in memory compared to non-MCI patients. Other degenerative dementias were seen in 13 and miscellaneous causes in 8 patients. One patient did not appear to have any cognitive impairment. Majority of the patients (80.4%) were bilingual or multilingual and 10 (4.9%) patients were illiterate. VaD was more common in men (3:1) and AD in women (1.5:1). Majority of the MCI patients had depression (54.4%) and seven patients developed AD during follow-up. All the patients were cared for at home by relatives except for one patient who had an appointed caretaker. Conclusions: Alzheimer’s disease was more common than vascular dementia in this study from an urban hospital in South India, in spite of the high prevalence of vascular risk factors in this population. Depression was a common cause of mild cognitive impairment. In this study of a relatively young (mean age) dementia cohort, all patients had home based care in contrast to studies from developed countries.