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COMMUNICATING MILD COGNITIVE IMPAIRMENT DIAGNOSIS WITH AND WITHOUT AMYLOID IMAGING: RECOMMENDATIONS FROM AN EXPERT WORKGROUP

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Background: The diagnosis of Mild Cognitive Impairment (MCI) is associated with uncertainty for patients and families and therefore may be challenging for clinicians to deliver. Amyloid imaging represents a new technology that may aid clinicians in determining MCI etiology and increase prognostic information for patients and families. **Methods:** We convened a meeting of an interdisciplinary group of experts representing multiple stakeholder perspectives to discuss the optimization of MCI diagnosis disclosure with and without amyloid imaging information. We formulated recommendations for clinicians providing care to MCI patients and families. **Results:** The MCI diagnosis should not be delivered to persons without objective impairment, nor should it be used to avoid delivering a diagnosis of dementia. Clinicians should use the MCI diagnosis to validate patient and family concerns about cognitive symptoms and educate them that their impairment is not normal for their age and education level. For patients meeting Appropriate Use Criteria after standard of care clinical workup (including structural neuroimaging), amyloid imaging may position specialists to offer more prognostic information. Positive and negative scan results should be communicated carefully, as neither is associated with 100% diagnostic certainty. Nevertheless, positive results should elicit further monitoring and conversations about appropriate advance planning. Communication of negative scan results should include that patients with MCI and a negative scan remain at elevated risk for dementia and that negative scans, while informative, do not indicate a specific diagnosis nor do they signify brain health. Clinicians should consider reviewing cognitive testing and amyloid imaging results with patients and their families and offer written summaries, including referral to appropriate social services. **Conclusions:** In patients with MCI, there is a need to devote considerable time and attention to patient education and shared decision-making, especially before engaging in diagnostic testing to elucidate disease etiology. Amyloid imaging can be a valuable tool to assess disease biology and aid the clinician in prognostication. Careful management of patient and family expectations and communication of scan results will be critical to the appropriate use of amyloid imaging information that enhances the clinical interaction.

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BEHAVIOURAL NEUROLOGY ASSESSMENT – REVISED: VALIDATION IN AMNESTIC MILD COGNITIVE IMPAIRMENT (AMCI)

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Background: The Behavioural Neurology Assessment-Revised (BNA-R) is an in-depth cognitive assessment tool that is intermediate between short screening tests and lengthy neuropsychological assessments. It provides a relatively quick and reliable assessment of seven cognitive domains: orientation, immediate verbal recall, delayed verbal and visual recall, delayed verbal and visual recognition, visuospatial function, working memory/attention/executive control, and language. Our objective was to validate the BNA-R for diagnosis of aMCI. **Methods:** Participants were assigned to the aMCI or normal control (NC) group based on detailed neuropsychological assessment. The BNA-R was administered within six months before or after this evaluation. To determine *concurrent validity*, we evaluated the BNA-R's ability to discriminate between aMCI and NC. Evidence for *construct validity* was obtained by calculating correlations between BNA-R subtests and neuropsychological tests from the aMCI and NC groups. **Results:** The aMCI (n=50) and NC (n=57) groups did not differ in mean (SD) age: 77.7 ± 6.5 vs 75.3 ± 7.9, education: 15.5 ± 3.4 vs 15.0 ± 3.2 or Full Scale IQ: 121.3 ± 14.0 vs 122.3 ± 13.6. There was a difference in male/female ratio: aMCI (27/23) and NC (19/38) (p=.031). With respect to concurrent validity, patients with aMCI scored significantly lower on BNA-R indices of orientation, immediate verbal recall, delayed verbal and visual recall, delayed verbal and visual recognition, and language but not on working memory/attention/executive control or visuospatial function (MANOVA). Logistic regression revealed that indices of immediate verbal recall, delayed verbal and visual recall, visuospatial function and working memory/attention/executive control correctly classified 92% of subjects (sensitivity=.92; specificity=.91). Regarding construct validity, most BNA-R subtests were significantly correlated with the neuropsychological subtests but the largest associations were between subtests of similar cognitive domains and smaller associations were between subtests of dissimilar domains. This demonstrates both convergent and divergent evidence for the constructs tested by the BNA-R. **Conclusions:** Classification rate of the BNA-R is superior to published data on the MoCA for aMCI vs NC. Setting appropriate BNA-R cut-offs can improve