

A unique pattern on memory testing in dementia screening predicts obstructive sleep apnea

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Objective: The Repeatable Battery for the Assessment of Neuropsychological Status (RBANS) is used to screen for dementia. A unique pattern of Immediate Memory lower than Delayed Memory scores (IM<DM) predicted Obstructive Sleep Apnea (OSA), a potentially reversible cause of "dementia" in our Memory Care Clinic (MCC) patients. We reviewed the results for all patients evaluated in our MCC for a total of three years. Methods: A retrospective chart review of all patients seen in our MCC from December 2011 to December 2014 was completed. Those with the pattern of interest (IM<DM) were compared to those without the pattern for the presence of OSA. Results: A total of 191 patients fit the inclusion criteria of completing the RBANS during the period of the study. Of the total group, 81 (42%) displayed the IM<DM pattern; 54 of these patients had been or were subsequently tested for OSA and 35 were positive (65%). The average age of the positive group was 74 and 60% were women. A previous study showed that Body Mass Index (BMI) was not significantly different between the two groups. Conclusions: OSA is a known risk factor for cognitive dysfunction. It is a potentially treatable cause of memory loss and can be clinically silent. This study shows that a unique pattern (IM<DM) on the RBANS commonly used at Memory Clinics can identify a group of patients who can be evaluated for this common and remediable condition.