

# WORLD NEURON CONGRESS

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### Obstructive sleep apnea in various cognitive disorders

Various research studies suggested an association between Obstructive Sleep Apnea (OSA) and various cognitive disorders, including Alzheimer disease. The degree of OSA has been directly correlated with the severity of cognitive impairment. Stroke and vascular diseases are significant comorbidities in these patients. We report the occurrence of OSA in patients with various cognitive disorders on the Island of Guam and correlate the severity of OSA with the results of the neuropsychological testing and neuroimaging studies. A retrospective review of medical records of patients evaluated in The Neurology Clinic with the diagnosis of OSA in patients with various cognitive impairments from July 2016 to July 2018 was conducted. These include patients with Alzheimer disease, vascular dementia, unspecified dementia, and Mild Cognitive Impairment. There were 375 patients with various cognitive impairments and 16% have been diagnosed with OSA. Among patients with OSA, 46% have severe OSA, 38% have moderate OSA, and 16% have mild OSA. Severe impairment on Global Cognitive Scores (GCS) was seen in 60% of patients with severe OSA, 44% of moderate OSA, and 20% of mild OSA. Moderate GCS were seen in 29% of patients with severe OSA, 39% of patients with moderate OSA and 30% of patients with mild OSA. Evidences of silent stroke were seen in 25% of patients and another 31% have leukoaraiosis on their neuroimaging studies. The occurrences of vascular diseases including hypertension, diabetes mellitus, hyperlipidemia and cardiac disorders were higher in those with severe and moderate OSA compared to those with mild OSA and without OSA. Obstructive Sleep Apnea is a common comorbidity of patients with various forms of cognitive impairment. The severity of OSA correlates with the degree of impairment on neuropsychiatric testing. Neuroimaging studies demonstrated evidences of Silent stroke and leukoaraiosis among these patients.

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### Biography

Ramel A Carlos is a board certified neurologist working on the Island of Guam for the past 16 years. He is currently working at The Neurology Clinic in Tamuning, Guam, USA. He completed his residency and fellowship training in Wake Forest University, Winston-Salem, North Carolina, USA. He has presented his clinical research in various neurology conferences including the Asean Neuroscience Conference in Singapore, World Congress of Neurology in London, U.K, Int. Conf. on Vascular dementia in Amsterdam, Int. Conf. of Alzheimer disease in Kyoto, Japan, and recently during the Advances in AD and PD Therapies in Torino, Italy.

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