

## **Carotid stenosis cause cognitive decline**

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Studies have found that cerebrovascular disease could play an important role on cognitive decline or dementia in patients without an obvious history of stroke. Recent studies have highlighted the role of carotid atherosclerosis, not only as a primary cause of cognitive impairment, but also adjuvant to the expression dementia caused by other factors, including Alzheimer's disease and other neurodegenerative pathology. Carotid intima-media thickness could predict accelerated cognitive decline, particularly in the domain of verbal and nonverbal memory, as well as a test of semantic association fluency and executive function. Carotid plaque biology and serologic biomarkers of vulnerability can be used to predict the risk of cognitive impairment. Patients with bilateral carotid stenoses have worse performance on the tests for executive function, attention, and memory than unilateral carotid stenosis. The difference in cognitive function between patients with left and right carotid artery stenosis was not significant in high stenosis grade, while in lower stenosis grade, badly cognitive function was observed in patients with left carotid stenosis than patients with right carotid stenosis. As carotid atherosclerosis always overlap with neurodegenerative pathology, the relationship between them still needs to be investigated in more studies due to multiplicity of underlying pathology.