

Cerebrovascular Contributions to Brain Aging and Dementia



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Accumulating information has converged to clarify a major role for age-associated changes in cerebrovascular health in cognitive decline and the development of dementia. It is now clear that vascular health is critical not only in individuals with cerebrovascular disease, but also that inter-individual variation in vascular health may have a major influence on brain tissue health, brain function, and cognitive and clinical status of older adults. It is currently unclear whether deterioration of cerebrovascular health plays a critical role in the pathogenesis of specific dementias, such as Alzheimer's Disease, or if poor vascular health is a 'second hit' providing an independent mechanism increasing neural burden, the rate of cognitive decline, and the probability of the development of dementia. We selectively review here recent studies demonstrating a link between vascular health, neural health, and cognition and clinical status in older adults with a focus on neuroimaging studies demonstrating a link between vascular and neural health.

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