

Vascular Cognitive Impairment Definitions:

Vascular Cognitive Impairment (VCI) includes the cognitive and behavioural disorders associated with cerebrovascular disease and risk factors, from mild cognitive deficits to frank dementia. VCI is a syndrome with cognitive impairment affecting at least one cognitive domain (e.g., attention, memory, language, perception or executive function) and with evidence of clinical stroke or subclinical vascular brain injury. VCI encompasses a large range of cognitive deficits, from relatively mild cognitive impairment of vascular origin (VaMCI) to Vascular Dementia (VaD), the most severe form of VCI. VCI also plays an important role in patients with Alzheimer's disease (AD) pathology who have coexisting vascular lesions.

Cognitive deficits: The pattern of cognitive deficits in VCI may encompass all cognitive domains, including focal stroke syndromes. Attention and executive function deficits include functions such as slowed information processing, impairments in the ability to maintain task set or shift from one task to **another and deficits in the ability to hold and manipulate information (e.g., working memory).**

Vascular pathology: Cognitive impairment can result from a range of vascular pathology, including multiple cortical infarcts, multiple subcortical infarcts, covert ("silent") infarcts, strategic infarcts, small-vessel disease with white matter lesions and lacunae, and brain hemorrhage.

Diagnostic criteria for vascular cognitive impairment following stroke has been defined by Gorelick et al (2011) and can be found in Table 2A.