



VASCULAR DEMENTIA

ABOUT VASCULAR DEMENTIA

- Second most common form of dementia after Alzheimer's disease.
- Results from arterial brain lesions by impaired blood flow to the brain.
- Impaired ability of reasoning, planning, judgement, memory and other thought processes.

History

- In the 1960s, a >100ml stroke was concluded to be a great risk of dementia development.
- 1970s, multi-infarct dementia (MID) was coined implying multiple strokes, whether asymptomatic or not occurring simultaneously could cause VD.
- Supported by CT, MRI and neuroimaging, non-infarct vascular changes such as white matter lesions (WML), small subcortical lacunes and microbleeds were also introduced as contributors to cognitive decline.

EPIDEMIOLOGY

- Higher prevalence of VD as compared to AD occurs in east-Asia.
- Men are affected more frequently than women.
- Mortality of VD patients exceeds AD.

RISK FACTORS

- Stroke
- Smoking
- Abdominal obesity
- Atherosclerotic disease
- Insulin resistance and diabetes mellitus
- Hypertension and dyslipidemia

CAUSES

- Stroke (infarction) blocking a brain artery.
- Brain haemorrhage caused by high blood pressure weakening blood vessel or by protein build-ups in small blood vessels.
- Narrowed or chronically damaged brain blood vessels.

SYMPTOMS

- Confusion
- Problems with memory
- Trouble paying attention and concentrating
- Restlessness and agitation
- Depression or apathy



THERAPY

Primary prevention

Prevention of strokes through risk factor modification - calcium channel blocker nitrendipine, ACE inhibitors and diuretics.

Secondary prevention

In the event of cognitive decline following a stroke, aggressive protective measures against further strokes should be initiated.

Symptomatic Therapy

- No drug has so far been approved for treatment of VD.
- All approved anti-AD drugs have been investigated in VD, including ChEIs and memantine.
- Non medicament therapies: Social interaction and intellectual stimulation, treatment of aphasia and emotional changes and acupuncture.



References:

- Vascular Dementia (Journal of the Neurological Sciences 2012) - Amos D. Korczyn, Veronika Vakhapova, Lea T. Grinberg
- <https://www.mayoclinic.org/diseases-conditions/vascular-dementia>