## Types of dementia



# Vascular dementia

Vascular dementia is the second most common type of dementia, and is characterised by abnormal or damaged blood supply to brain tissue.

It can be caused by a number of different diseases that affect the circulatory system.

Vascular dementia is caused by damage, narrowing or blockage of blood vessels, which impedes blood flow and causes neurons to die. This cumulative damage results in loss of brain function over an extended period of time.

Vascular dementia can be linked to one major stroke or a series of smaller strokes, known as Transient Ischaemic Attacks (TIA).

## Causes and types

- Multi-infarct dementia (MID): Multiple small strokes (cerebrovascular accidents tiny bleeds in brain blood vessels) create damage over a long period. These strokes cause microscopic clots and gradual loss of neurons in the cerebral cortex. The problem may not be noticeable until enough damage has accumulated over the years for the person to develop dementia. In a regular stroke, the bleed occurs in one of the larger blood vessels in the brain, causing a larger area of damage due to the blood clot. This in turn results in more noticeable neurological deficits such as sudden loss of speech, movement, sensory function or consciousness. Vascular dementia may follow this kind of stroke and particularly if there have been multiple episodes.
- » Subcortical vascular dementia: Caused by a thickening of the arteries, creating inadequate blood flow and damage deeper in the brain.

Standard cardiovascular risk factors apply in vascular dementia. These include high blood pressure, high cholesterol, smoking, diabetes, alcohol, poor diet, inactive lifestyle and family history.

## **Symptoms**

Symptoms vary depending on the degree of vascular damage and the part of the brain affected.

They may include:

- » Memory loss
- » Confusion
- » Disorientation
- » Difficulty organising thoughts, planning and concentrating
- » Difficulties speaking or understanding speech
- » Vision loss.

## **Diagnosis**

Assessment by a specialist physician is recommended. Investigations may include:

- » Assessment of personal history
- » Investigation of previous heart disorders and cardiovascular problems
- » Tests for heart health, blood pressure, cholesterol and blood sugar
- » General physical examination
- » CT and MRI scans
- » Neuropsychological testing.

#### Risk reduction

Reducing your risk of vascular dementia is lifelong and is directly related to the health of the circulatory system.

Ways you can modify your lifestyle to minimise risk:

- » Exercise
- » Nutrition: Wholefood diet (high in vegetables, quality sources of protein, low in sugar, minimal processed foods) and limit alcohol intake (two standard drinks or less on any given day)
- » Rest
- » Involvement: Stay socially connected
- » Challenge yourself: Try learning something new
- » Healthy heart
- » Quit smoking
- » Manage stress.

#### **Treatment**

Treatments for vascular dementia are directed at reducing further progression of disease and managing symptoms.

This may include:

- » Treatment to reduce high blood pressure and reduce the risk of further strokes
- » Management of ischaemic heart disease (reduced blood supply to the heart)
- » Medication specific to the dementia may be prescribed, such as cholinesterase inhibitors (galantamine, rivastigmine, donepezil). These drugs work by increasing levels of the nerve messenger, acetylcholine, in an effort to minimise cognitive symptoms of disease.

#### **Further information**

For support and information please contact us on 1300 66 77 88 or visit alzheimerswa.org.au

