

Vascular Dementia

Vascular dementia can occur when blood flow to the brain becomes reduced. Some people have both Alzheimer's and vascular dementia – often called mixed dementia.

Vascular dementia can also be called vascular cognitive impairment. Vascular dementia is sometimes split into more specific types. The most common of these are:

- Stroke-related dementia. This includes multi-infarct dementia (MID), which happens after a series of small strokes. It also includes dementia which happens after a stroke (called post-stroke dementia).
- Subcortical vascular dementia (also called Binswanger's disease, small vessel disease-related dementia or lacunar state). This is caused by changes to very small blood vessels in the brain.

Vascular dementia can have symptoms similar to Alzheimer's.

These symptoms can include memory loss, disorientation and problems with communication. There can also be more specific symptoms and these may differ depending on the area of the brain that is affected.

These symptoms may include:

- Becoming slower in thinking.
- Personality changes including depression and apathy (becoming disinterested in things).
- Becoming more emotional.
- Difficulty walking or changes in the way a person walks.
- Frequent urge to urinate or other bladder symptoms. This can be common in older age, but can be a feature of vascular dementia when seen with other symptoms.

The symptoms of vascular dementia get worse over time. Vascular dementia normally progresses over several years. However, the speed of progression can vary during the disease and from person to person. There may be a sudden, or stepwise, change after an event such as a stroke.

It is important to get the right diagnosis so that the right treatments and help can be given.

If you are worried about your health or someone else's, you should talk to your GP.

If your GP suspects dementia, they may refer you to a memory clinic or another specialist clinic. You will be asked about your symptoms and medical history. You may have a physical check-up and memory test. They may also send you for other tests including brain scans and blood tests. Together these tests will help a doctor to identify the problems in memory and thinking and the likely cause.

Brain scans such as CT (computerised tomography) or MRI (magnetic resonance imaging) may be helpful in giving a diagnosis of vascular dementia. This is because they allow doctors to look for changes in blood vessels which are common in this type of dementia. Scans also help doctors rule out other conditions that could cause similar symptoms.

While there are currently no specific treatments for vascular dementia, a doctor may prescribe medication to treat underlying, related, conditions.

This could include treatments for diabetes, stroke, high blood pressure, high cholesterol or heart problems. A doctor may also advise taking up a healthier lifestyle. This could include stopping smoking, taking exercise, maintaining a normal weight and eating healthily.

Some of the symptoms of vascular dementia may be managed by physiotherapy, occupational therapy or speech therapy.

People with vascular dementia may benefit from cognitive therapy. These activities are designed to stimulate thinking skills and engage people. They are often group-based and include games, with an emphasis on enjoyment.

For people with vascular dementia and Alzheimer's together (mixed dementia), there are some drugs which may help with the symptoms. You can discuss your treatment options with your doctor.

To help relieve symptoms of severe anxiety, agitation and aggression, a doctor may consider an assessment of someone's health and environment. This could help identify any causes or triggers of agitation or aggression. Non-drug approaches such as aromatherapy or music therapy may also be considered. This might depend on your preference as well as the availability of treatments. If non-drug treatments don't work, someone may be prescribed an antipsychotic drug. These can have severe side effects, and are not suitable for everyone. They should be carefully monitored. Your doctor will consider what may be appropriate.

Vascular dementia is caused by a reduction in blood flow to the brain.

Blood carries essential oxygen and nourishment to the brain and, without it, brain cells can die. The network of blood vessels that carries blood around the body is called the vascular system. There are a number of different ways that blood vessels in the brain can become damaged leading to vascular dementia:

- Stroke-related dementia. This occurs when parts of the brain become damaged following a stroke. A stroke occurs when blood supply to a part of the brain is suddenly cut off. This may cause difficulties in moving, or problems with coordination, speech and sight depending on the part of the brain affected. If a stroke causes memory loss and problems with attention, then a person may be diagnosed with post-stroke dementia. Similar damage can also be caused by small strokes in the brain (which may be called transient ischaemic attacks), which may be too small for a person to notice. This is sometimes called multi-infarct dementia.
- Subcortical vascular dementia. This is caused by a series of small changes to blood vessels deep inside the brain. A person usually does not notice these changes but they can, over time, damage parts of the brain that are important for attention, memory and language.

A number of factors may increase the likelihood of damage to blood vessels in the brain.

These include smoking, high blood pressure (known as hypertension), high cholesterol, type 2 diabetes, obesity and heart problems. For this reason, all of these factors can increase a person's risk of vascular dementia.

Although some of these risk factors can have a genetic basis, managing high blood pressure and high cholesterol might help to lower the risk of vascular dementia. Some research suggests that regular exercise and a healthy diet, especially in midlife and beyond, might help to lower our risk.

In exceptionally rare cases, vascular dementia can be caused by an inherited genetic disorder. One disorder is called CADASIL (cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy) which occurs in younger people and causes damage to blood vessels in the brain. If you are concerned about inherited forms of vascular dementia, you should discuss this with your GP.

