What is vascular dementia?
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02  visit: www.alzheimersresearchuk.org
Information in this introductory booklet is for anyone who wants to know more about vascular dementia. This includes people living with vascular dementia, their carers, families and friends. The booklet aims to help you understand more about vascular dementia. It gives an overview of the causes, symptoms and treatments.

The information here does not replace any advice that doctors, pharmacists or nurses may give you. It provides some background information which we hope you will find helpful.

The booklet was written in January 2014 and is due to be updated in January 2016. Please contact us if you would like a version with references or in a different format.
What is vascular dementia?

Dementia is used to describe a group of symptoms – these include memory loss, confusion, mood changes and difficulty with day-to-day tasks.

What is vascular dementia?

Vascular dementia is the second most common cause of dementia after Alzheimer’s disease. It 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 and is sometimes split into more specific types.
What is vascular dementia?

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.
Symptoms

Vascular dementia can have symptoms similar to Alzheimer’s. These 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:

- **Thinking skills**
  - Becoming slower in thinking.

- **Personality changes**
  - These may include depression and apathy (becoming disinterested in things). People may also become more emotional.
Symptoms

Movement problems
Difficulty walking or changes in the way a person walks.

Bladder problems
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.
Diagnosis

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.
Treatments

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.

For detailed information about all the treatments available, ask for our ‘Treatments for dementia’ booklet. Please see our contact details on the back of this booklet.
Support

There are a range of support organisations that offer practical and emotional support for people with dementia and those helping to care for them.

For more details about dementia, including contact details of support organisations, ask us for our booklet ‘Caring for someone with dementia: organisations that can help’ or visit our website at www.alzheimersresearchuk.org.

You can also speak to your GP or nurse for advice.
Causes

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, 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 (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.
Research

Over the last decade Alzheimer’s Research UK has funded more than £7.9 million of pioneering research across the UK into vascular dementia. This work is helping to increase our understanding of the condition.

Research is looking at how blood vessels can become damaged in the brain and how this damage causes the symptoms seen in vascular dementia. Our scientists are also working to develop innovative ways of preventing and treating vascular dementia.

We believe that dementia can only be defeated through research. Thanks to the generosity of our supporters, we hope to fund many more pioneering studies into vascular dementia.

Find out more

If you have questions about dementia research or want to find out more about how to get involved in research, contact our Dementia Research Infoline on 0300 111 5 111 or email infoline@alzheimersresearchuk.org

The Infoline operates 9.00-5.00pm Monday to Friday. Calls cost no more than national rate calls to 01 or 02 numbers and should be included in any free call packages.
Send me more information

For free information, simply complete this slip. You can drop it straight in a post box or put it in an envelope labelled with the freepost address overleaf. Alternatively, phone us on **0300 111 5555**.

I would like to know more about

Dementia: symptoms, diagnosis, causes, prevention and care

Treatments for dementia

Caring for someone with dementia: organisations that can help

The latest dementia research

Title

Name

Address

We would like to keep you informed about our research and our progress in defeating dementia. However, if you do not wish to receive any further communications from us, please tick here: ☐
We are the UK’s leading research charity aiming to defeat dementia.

We welcome your comments to help us produce the best information for you. You can let us know what you think about this booklet by contacting us using the details below.

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