

The term 'dementia' describes the deterioration or loss of certain abilities. It affects cognitive functions such as memory, learning, thinking or reasoning, and also affects a person's emotions and the person's ability to communicate. It is a symptom of certain medical conditions or diseases that affect the normal working of the brain, such as stroke or Alzheimer's disease. This factsheet describes some different types of dementia, the symptoms and lists some organisations that offer information and support.

Vascular dementia

Vascular dementia is the second most common type of dementia in the UK, after that caused by Alzheimer's disease. In order to function properly, the brain needs a **constant supply of blood** and this is 'delivered' via a network of arteries and blood vessels – the **vascular system**. If there are problems within the vascular system and **blood cannot reach the brain cells**, they will become **damaged** and eventually die. This damage may occur as a result of the **hardening** or **narrowing** of the **inside** of **blood vessels**, the **blood may** thicken or **clot too much** causing **blockages**, damaged blood vessels may **'leak'** blood or there may be problems with the **working of the heart**. Vascular dementia can occur as a result of this damage.

Early prevention is the same as for any other kind of stroke particularly in the **control of high blood pressure** (please see our factsheets F6 *High blood pressure*

and stroke and F8 *Diet and stroke* for further information).

There are **two main types** of vascular dementia related to stroke, **multi-infarct dementia** and **single-infarct dementia**.

Multi-infarct dementia

Multiple, small strokes are a common cause of **dementia**. This is known as **multi-infarct dementia (MID)**. An **infarct** is an area of dead tissue, in this case, brain cells. Multi-infarct dementia occurs when **blockages** in the blood supply to the brain occur **frequently** over a period of time in the smaller blood vessels, giving rise to **many tiny** and **widespread** areas of damage.

The continuing small strokes can go on for years, causing **further loss of function** leading to **confusion** and **intellectual deterioration**. In the **early stages**, some people may be **aware of the problem** (unlike people with Alzheimer's disease and some other forms of dementia). Some people experience periods of relative stability followed by further **significant and abrupt worsening** of the symptoms.

Single-infarct dementia

Sometimes a **single stroke** that is extremely **severe** or affects a particular area of the brain can cause dementia. This is called **single-infarct dementia** and unlike multi-infarct dementia the **area** of damage to the brain is **limited**.

Symptoms of vascular dementia

Symptoms may include:

- episodes of **confusion**
- **memory loss**
- **physical confusion** – problems with **co-ordination**, '**wandering**' or **getting lost**
- **hallucinations** – experiencing seeing or hearing things that are not actually taking place
- **delusions** – believing things that are not the generally accepted reality
- **personality** or **behaviour changes**, some people may become **aggressive**

The person may also experience other symptoms typical of **stroke illness** such as **paralysis** or **weakness** on one side of the body, **communication** problems, **depression** or **epilepsy**.

Another type of vascular dementia is **sub-cortical vascular dementia** (this is also known as **small vessel disease related dementia**). This is **not caused by stroke** but may be experienced by somebody who has also had a stroke. It is caused by **injury** to **small blood vessels** that are deep within the brain. The onset of

this type of dementia is **more gradual** than stroke-related dementia, and in this it is similar to the onset of Alzheimer's disease – this can make diagnosis more difficult.

A very **rare** form of **vascular dementia** is **Binswanger's disease**. This causes damage to blood vessels that are in the deep-white matter of the brain. Binswanger's disease mainly affects the person's memory, mood and ability to think. They may have **difficulty walking** and may also experience **tremors**.

Some people have both **vascular dementia** and **Alzheimer's disease** and are given a diagnosis of '**mixed dementia**'.

Types of dementia not caused by vascular disease or stroke

Alzheimer's disease

Alzheimer's disease is the **most common** type of dementia in the UK. No single cause has been found but factors such as **lifestyle, genes, age, general health** and **environment** are believed to be considerations. The symptoms begin **very gradually** and unlike people with some forms of vascular dementia, the person is **unlikely to be aware** of the deterioration of their abilities. Symptoms also include **memory loss** and **confusion**. The person may have difficulty making considered decisions or following conversations. They may become depressed or aggressive, lose interest in looking after themselves and become scruffy and unwashed.

Frontal temporal lobe dementia

This usually affects people **under 65 years** and is caused by damage to the parts of the

brain that control behaviour, emotions and language skills. The person may **lose inhibitions** and display a **lack of consideration for others**. In the later stages, the person's memory may be affected and symptoms may resemble Alzheimer's disease.

Dementia with Lewy bodies (DLB)

Lewy bodies are tiny deposits of protein that are found in nerve cells. Their presence in the brain interferes with its normal functioning and causes the decline and death of brain cells. A significant proportion of people with this type of dementia also go on to develop Parkinson's disease. They may experience **difficulty moving** and **judging distance** and may also have tremors.

Getting a diagnosis

If you think that you (or somebody that you are close to) may have vascular dementia, it is important that you **talk to your doctor**. It may help to **take a friend or relative** with you so that they can support you and help with describing the changes in you that they may have noticed. If the diagnosis is vascular dementia, treatment can begin and in accepting the diagnosis, you can then begin to look for **further information** and **practical help**.

The **GP** will need to **assess** whether the symptoms are actually due to dementia or to another condition and will ask questions about your **symptoms**, your **lifestyle** (for example, about your diet), and may also ask you questions that **test your memory**, your **ability to think, judge, remember** and

plan. The doctor will also carry out a **physical examination** and may check your blood pressure and cholesterol levels, check for heart problems and diabetes and look for weakness or numbness of limbs as this last can be a result of stroke (if stroke has not already been diagnosed). The **GP** may also **refer** you to a **specialist**, such as a clinical psychologist or neurologist. You will be given a **brain scan** and this will give more detail about the area and extent of damage to the brain.

Treatment

Once **dementia** is established, there is **no treatment** that will **reverse** the effects of the brain damage caused by the tiny strokes of multi-infarct dementia or the effects of dementia caused by a single major stroke. However, you may be prescribed **medication** such as **anti-platelet drugs** or **statins**. **Anti-platelet drugs** such as **aspirin** may help to prevent further strokes as they can **reduce** the risk of further damage to the vascular system. They stop the blood platelets from sticking together and causing blockages that may lead to stroke. **Statins** lower cholesterol levels and reduce the risk of **narrowing** or **hardening** of the **inside of the arteries**.

The drugs **galantimine**, **donepezil** and **rivastigmine** increase levels of the chemical acetylcholine in the brain. Acetylcholine is a neurotransmitter that sends 'signals' from one cell to another and in people with dementia this is progressively diminished. The drug **memantine** may be prescribed for more advanced dementia and this works on another neurotransmitter called glutamate.

Your **doctor** may also give you **advice** on a **healthy lifestyle** for example **eating healthily** – following a diet that is low in fat and salt; stopping **smoking**; taking regular **exercise**; avoiding drinking excessive amounts of **alcohol**; and having regular checks on your **blood pressure** and **cholesterol** levels. This will help you to **maintain health** and to **reduce** the **risk** of further **stroke**.

As well as accepting **practical or emotional support** that is offered by **relatives and friends**, there may also be support from your **local NHS** and **social services**. Depending on whether you live in your own home, live alone, live with family or a carer, or live in a care home or residential home, **different sorts of support** may be available from these services. Many people with dementia are cared for by a **carer** (often a relative) at home and also have **other physical conditions** (such as those arising from stroke). Further information on caring for somebody who has had a stroke is available in our factsheet F4 *Stroke: A carer's guide*.

A **district nurse** can help with or advise on day-to-day nursing care, whilst your local Social Services department may have services such as **local day care centres**, **help with transport** and **respite care** for carers. There may also be support services available from **local voluntary organisations**.

Some people in the **early** and **intermediate** stages of dementia are able to **carry on managing** everyday life although short-term memory problems can cause difficulties. It

can be helpful to use **prompts** to jog the memory, for example, leaving reminder notes to yourself in appropriate places around the house. For more information on ways of coping with memory problems please see our factsheet F7 *Cognitive problems after stroke*.

Useful organisations

Alzheimer's Society

Devon House, 58 St Katherine's Way,
London E1W 1JX

Tel: 020 7423 3500

Fax: 020 7423 3501

Helpline: 0845 300 0336 Mon–Fri 9am–5pm

Email: enquiries@alzheimers.org.uk

Website: www.alzheimers.org.uk

The **Alzheimer's Society** aims to support people with **all forms of dementia**, not just Alzheimer's. They are committed to building a better world for people affected by dementia. A range of publications and information sheets are available, including a factsheet called *What is vascular dementia?*, a free booklet called *An Introduction to Vascular Dementia* and a booklet for carers called *Caring for the person with dementia*. This is a helpful booklet that gives basic information on dementia and practical suggestions for carers, £8 including postage.

For Dementia

6 Camden High Street, London NW1 0JH

Tel: 020 7874 7210

Fax: 020 7874 7219

E-mail: info@fordementia.org.uk

Website www.fordementia.org.uk

For Dementia was established to provide a professional framework for admiral nursing –

a **specialist nursing intervention** focused on meeting the needs of carers of people with dementia. They work to promote and develop Admiral Nursing, provide high-quality training for professionals working with older people, carers and people with dementia and promote good practice in dementia care

London Centre for Dementia Care

University College London

Gower Street, London

WC1E 6BT

Tel: 020 7679 2000

Website: www.ucl.ac.uk/dementia

The London Centre for Dementia Care works towards improving dementia care in London. Their website is primarily directed at health professionals but also includes information on wider issues affecting people with dementia and their carers.

Mind

15–19 Broadway,

London E15 4BQ

MindInfoLine: 0845 766 0163

Fax: 020 8522 1725

Email: contact@mind.org.uk

Website: www.mind.org.uk

The charity Mind works to create a better life

for all those affected by mental distress. They publish a range of information including factsheets on *Understanding Dementia*, *Drugs for Dementia and Confusion*, *depression or dementia? The need for comprehensive assessment*.

Carers UK

20/25 Glasshouse Yard, London EC1A 4JT

CarersLine: 0808 808 7777, for information

and advice, (10–12pm and 2–4pm

Wednesday and Thursday only).

E-mail: advice@carersuk.org

Website: www.carersuk.org

Carers UK works for the support and recognition for all carers. They run local support groups across the UK.

For further information, phone the Stroke Helpline on 0303 3033 100, email info@stroke.org.uk or visit our website www.stroke.org.uk

If you are unhappy about any aspect of The Stroke Association, please make your views known to us immediately. We will happily discuss any issues and how they can best be resolved.



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