

What is dementia?

If you, or a friend or relative, have been <u>diagnosed with dementia</u>, you may be feeling anxious or confused. You may not know what dementia is. This factsheet should help answer some of your questions about dementia, including what causes it and how it is diagnosed.

The term 'dementia' describes a set of symptoms which include loss of memory, mood changes, and problems with communication and reasoning. These symptoms occur when the brain is damaged by certain diseases, including Alzheimer's disease and damage caused by a series of small strokes.

Dementia is <u>progressive</u>, which means the symptoms will gradually get worse. How fast dementia progresses will depend on the individual person and what type of dementia they have. Each person is unique and will experience dementia in their own way. It is often the case that the person's family and friends are more concerned about the symptoms than the person may be themselves.

Symptoms of dementia may include the following:

- Loss of memory this particularly affects short-term memory, for example forgetting what happened earlier in the day, not being able to recall conversations, being repetitive or forgetting the way home from the shops. Long-term memory is usually still quite good.
- Mood changes people with dementia may be withdrawn, sad, frightened or angry about what is happening to them.
- Communication problems including problems finding the right words for things, for example describing the function of an item instead of naming it.

In the <u>later stages of dementia</u>, the person affected will have problems carrying out everyday tasks and will become increasingly dependent on other people.

What causes dementia?

There are several diseases and conditions that result in dementia. These include:

- <u>Alzheimer's disease</u> The most common cause of dementia. During the course of the disease the chemistry and structure of the brain change, leading to the death of brain cells. Problems of short-term memory are usually the first noticeable sign.
- <u>Vascular dementia</u> If the oxygen supply to the brain fails due to vascular disease, brain cells are likely to die and this can cause the symptoms of vascular dementia. These symptoms can occur either suddenly, following a stroke, or over time through a series of

1

small strokes.

- Dementia with Lewy bodies This form of dementia gets its name from tiny abnormal structures that develop inside nerve cells. Their presence in the brain leads to the degeneration of brain tissue. Symptoms can include disorientation and hallucinations, as well as problems with planning, reasoning and problem solving. Memory may be affected to a lesser degree. This form of dementia shares some characteristics with Parkinson's disease.
- Fronto-temporal dementia (including Pick's disease) In fronto-temporal dementia, damage
 is usually focused in the front part of the brain. At first, personality and behaviour changes
 are the most obvious signs.

Rarer causes of dementia

There are many other <u>rarer diseases</u> that may lead to dementia, including progressive supranuclear palsy, Korsakoff's syndrome, Binswanger's disease, HIV/AIDS, and Creutzfeldt-Jakob disease (CJD). Some people with multiple sclerosis, motor neurone disease, Parkinson's disease and Huntington's disease may also develop dementia as a result of disease progression.

Mild cognitive impairment

Some individuals may have noticed problems with their memory, but a doctor may feel that the symptoms are not severe enough to warrant a diagnosis of Alzheimer's disease or another type of dementia, particularly if a person is still managing well. When this occurs, some doctors will use the term 'mild cognitive impairment' (MCI). Recent research has shown that individuals with MCI have an increased risk of developing dementia. The conversion rate from MCI to Alzheimer's is 10-20 per cent each year, so a diagnosis of MCI does not always mean that the person will go on to develop dementia.

Who gets dementia?

- There are about 800,000 people in the UK with dementia.
- Dementia mainly affects people over the age of 65 and the likelihood increases with age.
 However, it can affect <u>younger people</u>: there are over 17,000 people in the UK under the age of 65 who have dementia.
- Dementia can affect men and women.
- Scientists are investigating the genetic background to dementia. It does appear that in a few rare cases the diseases that cause dementia can be inherited. Some people with a particular genetic make-up have a higher risk than others of developing dementia.

Can dementia be cured?

Most forms of dementia cannot be cured, although <u>research</u> is continuing into developing drugs, vaccines and other <u>treatments</u>. Drugs have been developed that can temporarily alleviate some of the symptoms of some types of dementia. These drugs include the three acetylcholinesterase inhibitors:

- Aricept (donepezil hydrochloride)
- Exelon (rivastigmine)

- Reminyl (galantamine).

Alzheimer's disease

In March 2011, the National Institute for Health and Clinical Excellence (NICE) issued revised guidance on treatment, recommending that people in the mild-to-moderate stages of Alzheimer's disease should be given treatment with one of the acetylcholinesterase inhibitors.

The latest NICE guidance also recommends a different type of drug (memantine, trade name Ebixa) for people with severe Alzheimer's and some of those with moderate disease. For more information, see alzheimers.org.uk/accesstodrugs

Dementia with Lewy bodies

<u>People with dementia with Lewy bodies</u> may be offered an acetylcholinesterase inhibitor if their non-cognitive symptoms, such as hallucinations, delusions or associated aggressive behaviour, are very distressing.

Vascular dementia

<u>People with vascular dementia</u> will not be offered an acetylcholinesterase inhibitor, except as part of a clinical trial. This is because of a lack of evidence that these drugs are effective for symptoms of vascular dementia. Treatment should be aimed at the underlying cardiovascular (heart and circulatory) problems.

How can I tell if I have dementia?

Many people fear they have dementia, particularly if they think that their <u>memory</u> is getting worse or if they have known someone who has had the illness. Becoming forgetful does not necessarily mean that you have dementia: memory loss can be an effect of ageing, and it can also be a sign of stress or depression. In rare cases, dementia-like symptoms can be caused by vitamin deficiencies and/or a brain tumour. If you are worried about yourself, or someone close to you, it is worth discussing your concerns with your GP.

Diagnosing dementia

It is very important to get a <u>proper diagnosis</u>. A diagnosis will help the <u>doctor</u> rule out any illnesses that might have similar symptoms to dementia, including depression. Having a diagnosis may also mean it is possible to be prescribed drugs for Alzheimer's disease. Whether you are someone with dementia or a carer, a diagnosis can help with preparing and planning for the future.

Dementia can be diagnosed by a doctor - either a GP or a specialist. The specialist may be a geriatrician (a doctor specialising in the care of older people), a neurologist (someone who concentrates on diseases of the nervous system) or a psychiatrist (a mental health specialist). The doctor may carry out a number of tests to check basic thinking processes and the ability to perform daily tasks. They may request further tests, such as a brain scan or a more in-depth assessment of memory, concentration and thinking skills.

Can dementia be prevented?

At present, it is not clear what causes most of the diseases that lead to dementia. It is not clear what can be done to prevent dementia itself but the evidence does indicate that a healthy diet and lifestyle may help protect against dementia. In particular, exercising regularly, avoiding fatty foods, not smoking, drinking alcohol in moderation and keeping mentally and socially active into old age may help to reduce the risk of developing vascular dementia and Alzheimer's disease.

Further reading

Alzheimer's Society produces factsheets on a wide range of topics, including:

- What is Alzheimer's disease? (401)
- What is vascular dementia? (402)
- What is dementia with Lewy bodies? (403)
- What is fronto-temporal dementia, including Pick's disease? (404)
- Diagnosis and assessment (426)
- Rarer causes of dementia (442)
- What is Korsakoff's syndrome? (438)
- What is HIV-related cognitive impairment? (446)What is Creutzfeldt-Jakob disease? (427)
- Genetics and dementia (405)
- Drug treatments for Alzheimer's disease (407)

For details of Alzheimer's Society services in your area, visit alzheimers.org.uk/localinfo

Factsheet 400

Last reviewed: April 2011, updated: March 2012

Next review due: April 2013

Reviewed by Dr Sebastian Crutch, Dementia Research Centre, UCL Institute of Neurology and Dr Yvonne McCulloch, Clinical Health Psychology & Neuropsychology Department, Charing Cross Hospital, London

Alzheimer's Society National Dementia Helpline

England and Wales 0845 3000 336

Northern Ireland 028 90664100

Monday to Friday 8.30am-6.30pm

Registered charity no. 296645. A company limited by guarantee and registered in England no. 2115499.