

# What is dementia?

## ABOUT DEMENTIA

This Help Sheet describes dementia, who gets it and some of its most common forms. It describes some early signs of dementia and emphasises the importance of an early medical diagnosis.

Dementia is the term used to describe the symptoms of a large group of illnesses which cause a progressive decline in a person's functioning. It is a broad term used to describe a loss of memory, intellect, rationality, social skills and what would be considered normal emotional reactions.

### Who gets dementia?

Most people with dementia are older, but it is important to remember that most older people do not get dementia. It is not a normal part of ageing. Dementia can happen to anybody, but it is more common after the age of 65 years. People in their 40s and 50s can also have dementia.

### What causes dementia?

There are many different forms of dementia and each has its own causes. Some of the most common forms of dementia are:

#### Alzheimer's disease

Alzheimer's disease is the most common form of dementia and accounts for between 50% and 70% of all cases. It is a progressive, degenerative illness that attacks the brain. As brain cells shrink or disappear abnormal material builds up as "tangles" in the centre of the brain cells, and "plaques" outside the brain cells. These disrupt messages within the brain, damaging connections between brain cells. The brain cells eventually die and this means that information cannot be recalled or assimilated. As Alzheimer's disease affects each area of the brain, certain functions or abilities are lost.

#### Vascular dementia

Vascular dementia is the broad term for dementia associated with problems of circulation of blood to the brain and is the second most common form of dementia. There are a number of different types of Vascular dementia. Two of the most common are Multi-infarct dementia and Binswanger's disease. Multi-infarct dementia is caused by a number of

small strokes, called mini-strokes or Transient Ischaemic Attacks (TIA) and is probably the most common form of Vascular dementia. Binswanger's disease (also known as Subcortical vascular dementia) is associated with stroke-related changes to the brain. It is caused by high blood pressure, thickening of the arteries and inadequate blood flow.

Vascular dementia may appear similar to Alzheimer's disease, and a mixture of Alzheimer's disease and Vascular dementia can occur in some people.

#### Parkinson's disease

Parkinson's disease is a progressive disorder of the central nervous system, characterised by tremors, stiffness in limbs and joints, speech impediments and difficulty in initiating physical movements. Late in the course of the disease some people may develop dementia. Drugs may improve the physical symptoms, but can have side effects that may include hallucinations, delusions, temporary worsening of confusion and abnormal movements.

#### Dementia with Lewy bodies

Dementia with Lewy bodies is caused by the degeneration and death of nerve cells in the brain. The name comes from the presence of abnormal spherical structures, called Lewy bodies, which develop inside nerve cells. It is thought that these may contribute to the death of the brain cells. People who have dementia with Lewy bodies tend to see things (visual hallucinations), experience stiffness or shakiness (parkinsonism), and their condition tends to fluctuate quite rapidly, often from hour to hour or day to day. These symptoms allow it to be differentiated from Alzheimer's disease. Dementia with Lewy bodies sometimes co-occurs with Alzheimer's disease and/or Vascular dementia. It may be hard to distinguish Dementia with Lewy bodies from Parkinson's disease and some people who have Parkinson's disease develop a dementia similar to that seen in Dementia with Lewy bodies.

## **Fronto Temporal Lobar Degeneration (FTLD)**

This is the name given to a group of dementias when there is degeneration in one or both of the frontal or temporal lobes of the brain. It includes Fronto Temporal Dementia, Progressive non-Fluent Aphasia, Semantic Dementia and Pick's disease. About 50% of people with FTLD have a family history of the disease. Those who inherit it often have a mutation in the tau protein gene on chromosome 17 leading to abnormal tau protein being produced. No other risk factors are known.

## **Huntington's disease**

Huntington's disease is an inherited, degenerative brain disease that affects the mind and body. It usually appears between the ages of 30 and 50 and is characterised by intellectual decline and irregular, involuntary movement of the limbs or facial muscles. Other symptoms include personality changes, memory disturbance, slurred speech, impaired judgement and psychiatric problems. There is no treatment available to stop the progression of the disease, but medication can control movement disorders and psychiatric symptoms. Dementia occurs in the majority of cases.

## **Alcohol related dementia (Korsakoff's syndrome)**

Too much alcohol, particularly if associated with a diet deficient in thiamine (Vitamin B1) can lead to irreversible brain damage. If drinking stops there may be some improvement.

This dementia is preventable. The National Health & Medical Research Council of Australia's recommendations for the safe use of alcohol are that men should drink no more than 4 standard drinks daily and women should drink no more than 2 standard drinks daily. Development of alcohol related dementia and Korsakoff's syndrome has not been reported in people drinking regularly at or below these levels.

The most vulnerable parts of the brain are those used for memory and for planning, organising and judgement, social skills and balance. Taking thiamine appears to help prevent and improve the condition.

## **Creutzfeldt-Jacob disease**

Creutzfeldt-Jacob disease is an extremely rare, fatal brain disorder caused by a protein particle called a prion. It occurs in one in every million people per year. Early symptoms include failing memory, changes of behaviour and lack of coordination. As the disease progresses, usually rapidly, mental deterioration becomes pronounced, involuntary movements appear, and the person may become blind, develop weakness in the arms or legs and finally, lapse into a coma.

## **Is it dementia?**

There are a number of conditions that produce symptoms similar to dementia. By treating these conditions, the symptoms will disappear. These include some vitamin and hormone deficiencies, depression, medication clashes or overmedication, infections and brain tumours.

It is essential that a medical diagnosis is obtained at an early stage when symptoms first appear to ensure that a person who has a treatable condition is diagnosed and treated correctly. If the symptoms are caused by dementia, an early diagnosis will mean early access to support, information, and medication should it be available.

## **Can dementia be inherited?**

This will depend on the cause of the dementia, so it is important to have a firm medical diagnosis. If there are concerns about the risk of inheriting dementia, consult your doctor or contact Alzheimer's Australia to speak to a counsellor. Most cases of dementia are not inherited.

## **What are the early signs of dementia?**

The early signs of dementia are very subtle and vague and may not be immediately obvious. Some common symptoms may include:

- Progressive and frequent memory loss
- Confusion
- Personality change
- Apathy and withdrawal
- Loss of ability to perform everyday tasks

## **What can be done to help?**

At present there is no prevention or cure for most forms of dementia. However, some medications have been found to reduce some symptoms.

Support is vital for people with dementia and the help of families, friends and carers can make a positive difference to managing the condition.

### **Further Information**

Alzheimer's Australia offers support, information, education and counselling. Contact the National Dementia Helpline on **1800 100 500**.

For further information and to view other Help Sheets visit our web site at [www.alzheimers.org.au](http://www.alzheimers.org.au)