

Appendix 1

DIFFERENT FORMS AND CAUSES OF DEMENTIA

There are many different forms and causes of dementia. Some of the most common are:

Alzheimer's disease

Alzheimer's disease is the most common form of dementia representing between 50% and 70% of all cases. It is a progressive condition of the brain that results in impaired memory, thinking and behaviour. Memory of recent events is the first to be affected, but as the condition progresses, long-term memory is also lost.

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 in the area of the brain vital to memory and other mental functions eventually die and this means that information cannot be recalled or understood.

Risk factors for Alzheimer's disease are advancing age, family history and Down's syndrome.

Vascular dementia

Vascular dementia is a form of dementia caused by disorders of the blood vessels in the brain. It is the second most common cause of dementia. When arteries feeding the brain become narrowed or blocked, the blood flow to the brain is interrupted, resulting in a stroke and the death of a section of brain tissue.

Vascular dementia often causes problems with thinking, language, walking, bladder control and vision. High blood pressure, smoking, diabetes, high cholesterol and artery disease are risk factors.

Preventing additional strokes by treating underlying diseases, such as blood pressure, may halt the progression of vascular dementia.

Vascular dementia may appear similar to Alzheimer's disease. A mixture of Alzheimer's disease and vascular dementia is common.

Parkinson's disease

Parkinson's disease is a progressive disorder of the central nervous system. It is characterised by tremors, stiffness in limbs and joints, speech impediments and difficulty in initiating physical movements. Late in the course of this condition some people may develop dementia.

Dementia with Lewy bodies

The degeneration and death of nerve cells in the brain cause dementia with Lewy bodies. The name comes from the presence of abnormal lumps, called Lewy bodies, which develop inside nerve cells. It is thought that Lewy bodies 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 (similar to Parkinson's disease), and have more frequent falls. Their condition tends to fluctuate quite rapidly, often from hour to hour or day to day. Dementia with Lewy bodies is often mild at the outset and can occur by itself, or together with Alzheimer's or Parkinson's disease.

Fronto Temporal Lobar Degeneration (FTLD)

The frontal lobe is the part of the brain that governs mood, behaviour, judgement and self-control. FTLD is the name given to a group of dementias where there is degeneration in this part of the brain. Damage to these areas leads to alterations in personality and behaviour, and changes in the way a person feels and expresses emotion.

Language problems often occur early with FTLD and may range from limited speech to total loss of speech. Approximately 50% of people with FTLD have a family history of the condition.

Huntington's disease

Huntington's disease is an inherited, degenerative brain condition that affects the mind and body. It usually appears between the ages of 30 and 50 and symptoms typically start with mild personality changes. Huntington's disease 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.

Dementia commonly develops in the later stages of this disease.

Alcohol related dementia (Korsakoff's syndrome)

The excessive consumption of alcohol over a period of years, particularly if associated with a diet deficient in thiamine (Vitamin B1), can lead to irreversible brain damage and alcohol related dementia. This dementia is preventable.

The National Health and Medical Research Council of Australia's recommendations for the safe use of alcohol are that men should drink no more than four standard drinks daily and women should drink no more than two 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, planning, organising and learning. Taking thiamine appears to help prevent and improve this form of dementia as it can limit some of the toxic effects of alcohol. If drinking stops there may be some improvement. Your doctor can advise you about thiamine intake.

Other conditions that may produce or be associated with dementia are:

- HIV/AIDS
- Multiple Sclerosis
- certain types of head injuries
- brain tumours and brain haemorrhages
- infections of the brain, and
- exposure to certain toxins.

