Dementia is a broad term which is used to describe a group of symptoms that cause progressive damage to the brain. Dementia is not a specific disease but rather refers to the long term and often gradual decrease in a person’s ability to think, remember, and function in regular daily activities. Changes to personality, mood and difficulty using and/or understanding language may also occur.

The terms dementia and Alzheimer’s disease are often used synonymously however, Dementia refers to a group of cognitive symptoms such as memory loss and confusion, while Alzheimer’s refers to a specific type of dementia.

Dementia symptoms can be classified into (1) irreversible causes and (2) reversible causes (refer to the fact sheet What is Dementia).

**IRREVERSIBLE CAUSES OF DEMENTIA**

**Alzheimer’s Disease**

Alzheimer’s disease is the most common form of dementia accounting for approximately 50% - 70% of all dementia cases. The causes of dementia are not yet fully understood.

During the course of Alzheimer’s disease, nerve cells within particular regions of the brain, die off. This causes the brain to shrink. The outer layers of the brain are usually first affected, causing difficulties with short term memory – a hallmark sign of Alzheimer’s disease. As the brain continues to shrink, deeper parts of the brain are affected leading to difficulties with storing and retrieving information, learning new skills, using words and executing tasks.

It is not known what causes nerve cells to die but there are characteristic appearances of the brain after death. In particular, 'tangles' and 'plaques' made from protein fragments are observed under the microscope in damaged areas of brain. This confirms the diagnosis of Alzheimer’s disease.

The onset of the disease is usually quite gradual. Likewise, symptoms appear gradually, but progressively worsen as more parts of the brain are affected. Typically, Alzheimer’s disease begins with lapses in short term memory, difficulty in finding the right words for everyday objects or withdrawal from social activities. As the disease progresses, the symptoms become more obvious such as forgetting well known people or places, trouble using every day objects, difficulty with showering and/or other personal tasks and/or emotional unpredictability.

**Vascular Dementia**

Vascular dementia refers to the symptoms of dementia caused by problems of circulation of blood to the brain. The most common form of vascular dementia is multi-infarct dementia (MID). The name describes the occurrence of small strokes or infarcts in the brain. Where the stroke occurs there is permanent brain damage. People with high blood pressure are at greater risk of
suffering a stroke therefore, they are at greater risk of developing Vascular dementia.

The risk of developing this disease can be reduced by lifestyle changes e.g. attention to diet (reducing fat intake and blood cholesterol levels), not smoking, effective management of diabetes and regular exercise.

The progression of this disease follows a downward stepwise pattern. As a stroke happens there is a corresponding decline in abilities or worsening of symptoms. The person then seems to recover slightly although never to their previous level of functioning. Then another stroke may occur and the pattern of decline continues. Eventually strokes occur throughout the brain. The symptoms that present as each stroke occurs will depend on which area of brain is damaged.

In about 15% - 20% of dementia cases, MID and Alzheimer’s occur together.

Wernicke-Korsakoff Syndrome

Wernicke-Korsakoff is the third most common form of dementia and frequently (although not in all cases) occurs due to alcohol abuse. It is believed that the thiamine (Vitamin B1) deficiency experienced as a result of alcohol addiction may cause short-term memory loss and inappropriate responses.

This syndrome accounts for about 5% of all dementia cases seen, although it is the predominant cause of dementia within the indigenous people of Australia.

Other Causes

There are over 70 other diseases and conditions which cause irreversible dementia. These include: Down syndrome, Huntington’s disease, AIDS, Creutzfeld Jakob Disease (the human form of ‘Mad Cow Disease’), Pick’s Disease and Parkinson’s disease.

REVERSIBLE CAUSES OF DEMENTIA

Delirium

Delirium is a condition common in older people resulting from dehydration, electrolyte imbalance, illnesses and/or adverse effects of medication. The person may become confused and forgetful but unlike Alzheimer’s disease, the person with delirium has an altered level of consciousness, i.e. they do not appear alert.

Depression

Another condition that is common among older people and often mistaken for Alzheimer’s disease is depression. It is usually characterised by severe and prolonged mood changes and social withdrawal. It has often been referred to a ‘pseudo-dementia’.

Drug reactions

Every drug consumed has an effect on the body. As we age our bodies metabolise drugs differently as to when the body was younger. Therefore older people are most susceptible to adverse drug reactions. Over the counter medications such as paracetamol, cough medicines, vitamin supplements and herbal medicines can all adversely react with prescription drugs. These reactions may present the same symptoms as seen in Alzheimer’s disease, such as short-term memory loss, confusion and disorientation.

Please note; a person with irreversible dementia may also experience delirium, depression and/or adverse drug reactions at some stage. Therefore, if a person with dementia suddenly becomes increasingly vague, withdrawn and/or confused, it is important to seek medical attention. It could be that a treatable condition is co-occurring with the dementia leading to further debilitation.

For further information visit: www.dementia-australia.org or call 1800 180 023