Medicine for Managers

Dr Paul Lambden BSC MB BS BDS FDSRCS MRCS LRCP DRCOG MHSM

Dementia

Dementia comprises a group of symptoms affecting memory, the ability to think and to understand and which compromises social and daily activities. There are over one hundred types of dementia although Alzheimer's disease accounts for 60-70% of the cases. Dementia is often equated with forgetfulness but it can progressively impact on a range of facets of daily activity involving thought, behaviour and communication.

Research shows that between 8-900,000 people in the United Kingdom have dementia. Its incidence increases with age and about one in fourteen people over age 65 has dementia, a figure which rises to one in six over age 80. The number of patients with dementia is increasing because people are living longer. It is estimated that, by 2025, there will be over one million people who are suffering with the syndrome.

The *symptoms of dementia* may be insidious and may simply be dismissed as getting forgetful. However, they should not be regarded simply as a natural part of aging.

The key symptoms are:

- Memory loss, usually first noticed by a spouse or other friend or relative. It is progressive and inevitably becomes increasingly severe over time
- Slowing of speed of thought
- Language deterioration, resulting in the use of words incorrectly or struggling to find the words for expressive purposes
- Impaired spatial awareness and ability
- Impaired ability to understand

- Behavioural deterioration including impairment of judgement, loss of inhibition, actions which are out-ofcharacter, emotional lability, loss of social abilities and difficulties fulfilling daily activities
- Difficulty reasoning and planning
- Mood swings and personality changes
- Relational deterioration which can impair interpersonal emotions and even recognition
- Depression, anxiety, paranoia and agitation (in some patients)
- Hallucinations

Seeing a GP. Anyone with memory problems should consult a doctor. Similarly, recognising any symptoms in close family members is important and should result in them having a medical examination. Some medical conditions can cause symptoms which may mimic dementia and so it is essential to establish any underlying cause which may be treatable.

What happens in dementia? It is caused by damage to nerve cells and to the connections between nerve cells. The symptoms produced

will depend on the area of the brain which is affected.

Dementias that progress are not reversible. Most such dementias fall within four groups

- Alzheimer's Disease. Named after Alois Alzheimer who first described it, it is the
 - most common form of dementia. The cause is thought to be multifactoral though some cases are related to mutations of three genes, passed from parent to child. Connections between brain cells are lost because of build-up of abnormal structures called *plagues* and *tangles* (fibrous protein), resulting ultimately in brain cell death. Chemical transmitters between nerve cells are also diminished. As the brain is increasingly

damaged, the symptoms worsen. This is the most common form of dementia.

- 2. Vascular Dementia In this form, damage to blood vessels compromises oxygen supply to the brain and damages the cells, or results in stroke. In this form of dementia, slowed thinking and difficulty with problem solving may be more noticeable than memory loss. This is the second most common type of dementia.
- **3.** Lewy Body Dementia. Lewy Bodies are abnormal aggregations of protein that develop inside brain nerve cells.

- Common features are hallucinations and and loss of attention, slow movement and tremors.
- 4. Frontotemporal dementia. This is characterised by degeneration of brain nerve cells and their connections in the frontal and temporal regions, areas associated with personality, language,

judgement and personality.

Dementia may be associated with other conditions:

- Huntington's Chorea where brain cells atrophy resulting in loss of ability to think
- Traumatic Brain Injury, such as occurs in footballers and boxers where repeated head trauma damages the brain cells
- Creutzfeldt-Jakob Disease can be inherited and has no known cause but might be due to the deposition of proteins called prions.

 Symptoms normally appear later in life.
- Parkinson's disease patients may develop a form of dementia.
- Head Injuries, especially after repeated blows associated with such sports as boxing or heading the ball in football.

Some disorders may cause dementia-like symptoms which can be reversed or improved with treatment:

- Some infections and immune disorders
- Some nutritional deficiencies such as deficiency of vitamin B group and folic acid
- Excessive alcohol usage reduction

The Alzheimer's Society provides valuable help. It produces factsheets for patients and training, publications and an available Dementia Knowledge Centre for healthcare professionals. To make contact: Enquiries 0333 333 0804 Support 0333 150 3456 https:// www.alzheimers.org.uk Address Alzheimers Society Scott Lodge Scott Road Plymouth PL2 £DU

- High cholesterol being lowered with appropriate medication
- Good control of diabetes. Poorly controlled diabetes is a risk factor
- Management of medication side-effects
- Identification and removal of exposure to some poisonings
- Anoxia, where the brain is starved of oxygen as, for example, in asthma or severe sleep apnoea

Risk factors that cannot be changed are the age of the individual and a family history of dementia, which increases the risk of developing the condition.

Prevention of dementia

There is no way to prevent dementia but it is thought that some measures might help.

- Remain physically and socially active
- Do not smoke (reduces vascular risk)
- Ensure blood pressure and cholesterol levels are controlled
- Have a healthy diet, including fruit, vegetables, omega-3 fatty acids and wholegrains
- Sleep well

Dementia is desperately destructive for the individual and the family who find themselves left, in many cases over time, with a physical shell of the person they once knew.

There is considerable research activity and we can only hope that this increasing scourge will be managed and prevented.

paullambden@compuserve.com