North West Dementia Centre

DEMENTIA – FACTSHEET

What is dementia?

Dementia describes a clinical syndrome and not a diagnosis. It is like saying that someone has jaundice or heart failure. There are 3 main parts to dementia:

1. **Cognitive loss** - comprises problems with memory (amnesia), language (aphasia), a failure to carry out physical tasks despite having intact motor function (apraxia), and failure to recognise objects or people despite having intact sensory functions (agnosia).

2. **Non-cognitive features** - a wide range of psychiatric symptoms and behavioural disturbances. Psychiatric symptoms include: depression; delusions; hallucinations (both visual and auditory) and misidentifications (a failure to recognise people). Behavioural disturbances include: aggression; wandering; agitation and sexual disinhibition.

3. **Activities of daily living** - in the early stages of dementia these can take the form of difficulties with shopping, driving and handling money. In the later stages more basic tasks are affected such as dressing, feeding oneself and going to the toilet.

Determining the presence of dementia

The presence of dementia is determined by the history of the illness, findings on mental state examination, the results of a physical examination and the outcome of investigations.

When presented with a person who may have dementia, a clinician considers a number of conditions that can mimic the dementia. This range of conditions makes up what is called the 'differential diagnosis'. It is like the situation when your car doesn't start – the differential diagnosis includes the battery being flat, no petrol in the engine or the starter motor failing. The differential diagnosis of dementia includes the following:

- **Depression -** In depression, complaints of memory problems by the person are commoner than in dementia, where it is often the relatives or the carers who notice memory loss. Problems with concentration rather than amnesia are common in depression and the length of the illness is usually shorter by the time that it comes to the attention of a clinician (months rather than years). Dementia and depression can co-exist and studies have suggested that as many as two thirds of people with dementia also have symptoms of depression.

- **Delirium** - This is caused by a physical illness and is manifest by an acute disturbance characterised by a changeable mental state and a fearful mood. There is almost always a physical cause for the disturbance, most often an infection. The treatment of delirium is that of the underlying disease which is its cause. Delirium tends to start very quickly and patients seldom have symptoms for very long before they come to the attention of clinicians.

- **Drugs** - A variety of drugs can cause symptoms similar to dementia and a clinician will always take a very careful drug history in anyone with symptoms of dementia.

- **Normal ageing -** We all know that one's memory begins to fail as one gets older and it can often be very difficult to determine whether symptoms of memory loss are part of the normal aging process or represent a very early dementia. Probably the most sensitive test is to see whether the symptoms deteriorate over time – if they do not deteriorate significantly they are more likely to be part of the normal ageing process.

History

When a person presents with possible dementia it is important to get a history about how the problems started and how they developed. Because a person with dementia has a poor memory, a clinician usually relies on someone else who, ideally, has known the person and is able to describe what they are normally like and any changes which they have observed. This person is called 'an informant'. Most often this informant is an informal carer / relative. Questions typically asked of the informant are: What was the first thing you noticed wrong? Did it start suddenly or gradually? Have the person's symptoms got worse since they started? It is important to obtain information about whether the individual is able to look after themselves.

Examination

This takes two forms. First, a mental state examination is carried out by talking to the person. Complaints of memory will be noted and specific symptoms will be asked about depression, persecutory ideas, delusions (false beliefs), hallucinations (hearing and seeing things), sleep disturbance, eating habits and aggression. Tests of memory will be carried out and it is usual to have a test administered such as the Mini-Mental State Examination (a test out of 30, 30 being normal and 0 indicating very severe impairment – see NWDC fact sheet on 'tests').

Second a physical examination takes place. This can vary in its intensity but usually a clinician would check the pulse and blood pressure, listen to the chest and heart, feel the abdomen for any lumps and test the nervous system for signs of a stroke (by assessing the reflexes with a tendon hammer and testing the power and coordination of muscles).

Investigations

Anyone presenting with a suspected dementia should have a range of physical investigations including blood tests to:

- measure the functioning of the liver and kidneys,
- test for anaemia,
- check vitamin levels in the blood,
- assess thyroid function, and
- measure blood glucose levels to check for the presence of diabetes.

Brain scans

The commonest type of brain scan is a CAT, CT or computed tomography scan. This provides a measure of the brain by which one is able to tell whether there has been any shrinkage of the brain (atrophy) or any evidence of a stroke. A scan is usually carried out to exclude any disorder in the brain which is potentially treatable such as a bleed into one of the linings of the brain (sub dural or extra dural haematoma) or a brain tumour. Another similar type of scan is an MRI scan.

The causes of dementia

The main causes of dementia are:

- Alzheimer's disease;
- Vascular dementia;
- Lewy Body dementia;
- Frontotemporal dementia and
- Creutzfeldt-Jacob disease

Fact sheets on these dementias are available from the North West Dementia Centre – details below.

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The views expressed in this factsheet are those of the author, not necessarily those of the NWDC.

For further copies of NWDC fact sheets contact the North West Dementia Centre on 0161-275-5682 or nwdc@manchester.ac.uk. Alternatively write to the Information Officer, North West Dementia Centre, Dover Street Building, The University of Manchester, Oxford Road, Manchester. M13 9PL.