

# Psychiatry of Old Age

## **Introduction**

Although mental disorder is relatively common in old age, it still affects a minority and when present reflects a state of illness rather than the effects of ageing alone. Mental disorder can be divided into two broad categories:

## **Symptoms of "brain failure" or organic disorders**

These may be acute (confusional state/delirium) or chronic (dementia).

## **Functional disorders**

The most common is depression, often with many symptoms of anxiety. A psychotic illness similar to schizophrenia in young adults may occur (formerly known as late paraphrenia). Drug and alcohol addiction are perhaps more prevalent in older people than we care to recognise. Anxiety disorders and personality difficulties may persist into old age and the former may indeed arise for the first time when a vulnerable personality is confronted by severe adversity.

The prevalence of these two categories of illness in elderly people depends on exactly which age group is examined and where they are living. In community surveys of all people aged over 65 years, approximately 5% are found to have severe organic brain disorders (mainly dementia) and a further 5% to have mild symptoms of forgetfulness. 2.5-5% will have depression severe enough to warrant treatment with a further 10% complaining of minor depressive/anxiety symptoms. Late onset schizophrenic illnesses are much less common, perhaps 0.5-1.0%.

If one looks at the very elderly (greater than 80 years) the rates of organic disorders, mainly dementia, are much increased, (e.g. 20%) whereas other diagnoses may occur less frequently - in other words organic disorder is (as one might expect) a disorder associated with increasing age.

If one looks at residents in local authority homes, hospitals or other institutional care, the rates for both organic and functional disorder (particularly depression) are much increased - about 30% each type. It is probable that mental disorder will have contributed to the person entering the institution, e.g. dementia making them unable to survive safely in their own home - but the combination of losing one's home and familiar surroundings can also aggravate existing confusion and/or depression.

## **The Ageing Population**

The table shows the predicted age structure of the UK population for the years 1981 to 2001. The increase in the proportion of elderly people is in the 75-84 year group (+11%) and more particularly in those 85+ years (67+) - numbers of younger people changing little. The vast majority of these older people live at the present time in their own homes, only 6% being in institutional care (residential homes or hospital)

Age Band	1981 (millions)	2001 (millions)	% change
65-74	5.2	4.7	-9
75-84	2.7	3.0	+11
85+	0.6	1.0	+67
All 65+	8.5	8.7	+2

Those over-85's are predominantly women, the majority widowed and living alone. This very elderly group have high consultation rates with general practitioners, with many more home visits from these doctors, and occupy up to 50% of all NHS beds (medical, surgical and psychiatric). They are more likely to have complex combinations of physical, psychological and social difficulties which require multidisciplinary assessment and treatment.

## **Dementia**

About 5% of the general population over 65 years suffer from severe cognitive impairment with a further 5% showing mild changes which may progress with time. Dementia refers to a global impairment of mental function which follows a chronic and progressive course. It is related to progressive cerebral degeneration which may be caused by a variety of pathological processes. Post mortem changes found in the brains of demented patients include (approximate figures):

Alzheimer's disease	50%
Vascular dementia	10%
Dementia with Lewy bodies	15%
Mixed vascular/Alzheimer's disease	15%
Other causes	10%

### **Alzheimer's disease**

Alzheimer's disease is characterised by a gradual insidious onset and progressive course, often beginning with memory failure before other cognitive functions (e.g. language, praxis) become affected. Non-cognitive features (depression, psychosis, wandering, aggression, incontinence) are common. Physical examination is often normal, as our routine blood investigations. CT scan may be normal or show generalised atrophy.

### **Dementia with Lewy bodies**

Dementia with Lewy bodies is characterised by the triad of fluctuating cognitive impairment, recurrent visual hallucinations and spontaneous parkinsonism, though not all occur in every patient. As with Alzheimer's disease, onset is insidious and may begin with cognitive problems, parkinsonism, or both. Cognitive impairment initially affects attentional and visuospatial function, with memory initially relatively spared. As with Alzheimer's disease, non-cognitive features are common. Parkinsonism consists mainly of bradykinesia rather than tremor and, once again, routine blood investigations are normal. CT scan may be normal or show generalised atrophy.

### **Vascular dementia**

In contrast Vascular dementia usually has an abrupt onset, often in association with a recognised stroke, and is associated with a fluctuating course, a stepwise decline and often reasonable insight at least in the early stages of illness. An exception to this course is subcortical Vascular dementia, which may cause some 20% of all Vascular dementia, when sudden onset and stepwise course may not be seen. Patients will often have risk factors for vascular disease and other evidence of this, for example ischaemic heart disease or peripheral vascular disease. Physical examination is likely to reveal focal neurology and CT scan would be expected to show evidence of cerebrovascular disease.

### **Other dementias**

Other causes include rarer degenerative processes, e.g. Picks disease, Huntington's chorea, in addition to alcoholic brain failure, tumour, haematoma, etc. In some cases no discernible pathology is found.

By careful history taking and examination of both physical (particularly neurological) and mental state, it is possible to predict the likely underlying pathology in most patients with dementia. No specific diagnostic tests are yet available, but clinical diagnosis may be usefully supported by structural brain imaging methods such as CT or MRI scanning and functional imaging techniques such as SPET (Single Photon Emission Tomography) scanning. It is important to develop methods of establishing the aetiology of dementia during lifetime:

- To assist in predicting course of illness and determining prognosis.
- To inform management decisions; for example specific treatments are becoming available for Alzheimer's disease (cholinesterase inhibitors) and vascular dementia and it is necessary to know which patients should receive which treatment.

Patients with dementia usually present *either* because of failure to cope *or* with disturbed behaviour occasionally with both. They often lack insight into their illness or, in the early stages, deny it. Demented patients need:

- Assessment of cause and severity of dementia (cognitive impairment and behavioural abnormalities)
- Assessment of deficits in function and need for care (dependency)
- Assessment of the social situation
- Provision of treatment and care appropriate to the needs which have been identified
- Support for carers - practical and emotional
- Review of the above points - is the treatment and care appropriate and beneficial?

About 50% of cases of dementia have concurrent physical health problems. The burden of care produced by a physically sick patient with dementia is greater than that of a fit one, therefore, diseases should be sought and treated where appropriate. Dementia may also be complicated by:

- Emotional lability
- Depression
- Psychotic features (i.e. delusions and hallucinations)
- Behavioural disturbances (i.e., wandering, aggression, incontinence)

These may be helped by pharmacotherapy, counselling and explanation and support to relatives. Such patients may respond either to antidepressants for lability and depression, or antipsychotic agents for psychotic features and some behavioural disturbances. Patients with dementia are very usually sensitive to side effects of psychotropic drugs and so it is important to begin therapy with very low doses of medication (e.g. risperidone 0.5 mg) and monitor carefully for side-effects, particularly extrapyramidal problems.

### ***Acute Confusion (a.k.a. Delirium).***

Elderly people seem particularly likely to develop confusion in response to a wide range of stimuli - either physical insults or sudden social change. This presumably reflects the reduced ability of the aged brain to cope with such events, particularly if it is additionally damaged by a dementing process. An acute confusional episode may sometimes be the first evidence of an underlying dementia. Elderly patients with acute confusion are seen throughout medical practice, e.g. 20% of all acute medical ward admissions are found to be acutely confused. In elderly people apathy, under-activity and clouding of consciousness are more common presentations of delirium than the florid, overactive restless, hallucinating states usually described in relation to younger patients. Causes include:

- Intercurrent physical ill-health
- Adverse reaction to a prescribed drug or drugs
- Catastrophic social situations, e.g. a move into residential care

Acute confusion should be regarded as indicative of underlying disease and investigated medically. Untreated it has a 40% mortality rate.

The clinical approach is to complete a full physical examination looking for evidence of infection, stroke, MI or other illness. A review of medication should focus on drugs started or stopped recently. Until the underlying cause is determined and treated, a small dose of an antipsychotic agent may reduce the severity of delirious episodes.

## ***Depression***

This is the most common psychiatric disorder found in old people (if milder cases are counted) and the second commonest single underlying cause for all GP consultations for people over 70. The majority of depressive syndromes are of mild to moderate severity. About one fifth of cases are severe and carry the risk of suicide - especially in men, in those which fail to remit within 6 months of onset and in those who feel physically ill (hypochondriacal) especially if they have the delusional belief that they suffer from cancer. Depression in old age may be precipitated by adverse life circumstances:- bereavement; loss of health; threat of bereavement or loss of health in a key figure. As with younger patients those who suffer may have vulnerable personalities (i.e. anxious and obsessional by nature) or may have no close confidantes (i.e. the socially isolated). More recently evidence has emerged suggesting that depression occurring for the first time in later life may be associated with subtle brain abnormalities, such as an increase in white matter lesions on neuroimaging, which may reflect hidden or undetected cerebrovascular disease.

The clinical approach with mild cases of depression is unlikely to involve the Old Age Psychiatry Service, since they will be treated by the Primary Health Care Team. Support and counselling may be supplemented by the use of antidepressants. More severe or persistent cases are likely to be referred for specialist assessment and treatment. Depressive illness in old people shows a wide range of clinical presentations - the typical picture of low mood and vegetative disturbance of sleep and appetite seen in younger people may predominate. Some patients become apathetic, withdrawn and appear to lose their cognitive abilities (this is called depressive "pseudodementia" as cognitive impairment may be so marked as to mimic organic dementia). Others may present with a picture of severe agitation and restlessness, accompanied by delusions of ill health or poverty, e.g. that they are dying of a brain tumour, that their bowels have stopped working and are rotting inside them, or that they are unable to pay for their hospital treatments.

The majority of cases respond as well to treatment as younger patients - perhaps even better! Poor outcome is often the consequence of inadequate treatment. The older tricyclic antidepressants are often not well tolerated, postural hypotension, urinary and gastrointestinal side effects being prominent.

Dosage should be titrated to the maximum tolerated, starting doses generally being 1/3 - 1/2 of those for younger patients. Newer antidepressants such as SSRIs have a particular place in the treatment of the elderly. Delusional depressions require the addition of neuroleptics - for unresponsive or severe depressions ECT is a safe and effective treatment. Lithium carbonate has a valuable place in prophylaxis of recurrent episodes and is also effective in potentiating or augmenting the antidepressant actions of tricyclics.

Many elderly depressed patients have previous or current physical illness, not only must this be taken into account during treatment, e.g. caution with tricyclic antidepressants in a patient with ischaemic heart disease, but physical illness must be treated in its own right to maximise the patient's chances of recovering from their depression.

## ***Paranoid States***

It appears to be a normal feature of ageing that individuals become rather more inflexible in their attitudes and fearful of adverse influence by the outside world. Elderly people are often not only physically and financially disadvantaged, but they enjoy relatively low social status and are often the victims of attack or deception. It is, therefore, perhaps not surprising that persecutory ideas (which we tend to lump together as paranoid symptoms) often emerge. The main conditions in which this occurs are:

## **Late onset schizophrenia/delusional disorder**

This was formerly known as paraphrenia. The typical subject is an elderly spinster, with sensory impairments (deafness or visual impairment), living alone and isolated. Her self-care skills are good and she is apparently normal apart from the possession of a complex delusional system in which she believes she is the victim of a conspiracy (usually to defraud her). She hears third person auditory hallucinations, may smell odours, which she interprets as poison gas pumped into her room and misinterprets chance occurrences as having special significance. This psychotic illness, similar to schizophrenia in younger life, responds to antipsychotic drugs if the patient can be persuaded to take them. A depot injection given by a Community Psychiatric Nurse is often a useful vehicle which improves compliance with medication and provides regular contact with the patient.

## **Acute confusional state/delirium**

Paranoid symptoms are common during delirium, the patient misinterpreting events because of his/her altered level of consciousness. The management of these symptoms has already been described - neuroleptic medication may help to reduce agitation and behavioural disturbances.

## **Paranoid Reactions to Forgetfulness**

These usually occur in independent old people who explain their experience of forgetting where things have been placed by accusing others of stealing them. Objects stolen are usually everyday ones, e.g. cups, teapots, pension book or glasses. Stolen objects often are returned or reappear in the usual place. The most likely cause of forgetfulness and paranoid misinterpretation is, of course, a dementing process. Neuroleptic medication is seldom of benefit in these circumstances.

## **Anxiety Disorders**

Anxiety disorders do occur in old people, about half of it persisting from early life and half coming on for the first time in response to the stresses of ageing. A common precipitant stress is that of failing physical health, e.g. developing an acute phobic state after a fall from a bus, leading to a fracture and a period of reduced mobility.

Behavioural methods of treatment may be effective. Diffuse anxiety and loss of confidence, even if precipitated by an adverse event, may indicate an atypical form of depression. Such patients respond better to antidepressant, rather than anxiolytic, drugs.

## **Assessment Procedures**

### **Diagnostic Procedures**

These are of primary importance and include both psychiatric and medical history taking together with physical examination and mental state assessment (including cognitive examination). Diagnostic procedures, e.g. EEG, blood tests or CT scan are used as necessary. Illnesses in old age are commonly multiple, so that patients often suffer from two to three definable illnesses.

### **Disorder of Function**

Diagnosis alone does not tell you how severely disabled someone is. Two people with the same condition may behave very differently, e.g. dementia due to Alzheimer's disease may render one person unsafe for independent living, but simply slow the other one down in the time taken to complete the daily crossword. It is important therefore to assess the *functional disability* that an old person suffers from and decide whether it can be relieved. Occupational Therapists and Physiotherapists play an important part here, but the doctor needs to be aware of this aspect of illness when he/she is taking a history. Not all functional disability is caused by illness - some is due to failure to learn (e.g. a widower who cannot cook and never could) or due to disuse atrophy, (e.g. taking to bed with an illness and then losing the ability to walk).

**Quantifying Functional Disability**

It is possible to quantify the changes referred to above and this assists not only in judging their severity but also watching their response to rehabilitation or observing any deteriorating with time or treatment. During your placements you will be shown standardised methods of measuring - cognitive performance, skills in activities of daily living and mood state.