Schizophrenia

Late onset schizophrenia presents differently from early onset schizophrenia and medication is complex. Treatment should be reviewed and guidelines should be followed. Awareness of recent changes to legislation and its implications for management is also important.

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Schizophrenia has always posed diagnostic and management problems for clinicians, particularly in elderly patients. Recent research has helped differentiate between different types of late onset schizophrenia and distinguish them from early onset types and other causes of late onset psychosis. Demographic changes, however, have led to increased numbers of ageing late onset schizophrenics (LOS) in the community and resulted in an increase in burden on health and social care resources.

Management is complicated by the heterogeneous nature of the illness, comorbidity, concerns over safety of medication and an increasing prevalence of cognitive impairment. Recent legislation relating to detention, capacity and safeguards of liberty aim to give better care and legal protection to this subgroup but their effectiveness is, as yet, unknown. This article aims to provide an update into these areas of care provision that pose interesting problems in both primary and secondary care.

Effective intervention and treatment

Difficulties in providing health and social care and an increasingly complex legal framework are amplified in elderly patients and compounded by comorbidity and an increasing incidence of cognitive impairment. It is likely that these difficulties will increase rather than decrease with time unless service provision expands to meet the needs identified by more research and awareness of the problems of this segment of the ageing population.

Demographics

Demographic changes and reduction in institutional care has caused a rise in the number of older people with schizophrenia living in the community. The 1 year prevalence rate of schizophrenia in the 45–64 years age group is 0·6 %. For individuals over 65 years the prevalence ranges from 0·1 to 0·5%.[1] In effect this constitutes a new generation of older people with little exposure to long-term inpatient care and with different characteristics and needs, raising questions of adequacy of care.[2] Mortality rates among people with schizophrenia are two to four times higher than the general population. The Health Education Authority (1998) estimates the annual cost of schizophrenia in the UK to be around 2·6 billion pounds, and the cost of caring for people with schizophrenia aged ≥65 years was higher than for younger people due to medical comorbidity and cognitive impairment.

Definitions

Patients with schizophrenia of later life include those with early-onset schizophrenia (EOS) who have grown older, and those who develop the illness in late adult life—LOS. Based on the consensus statement by members of the International Late Onset Schizophrenia Group, cases with onset between the ages of 40–60 years are LOS and cases occurring after the age of 60 years are called very late onset schizophrenia like psychosis (VLOSLP).[1]

LOS and VLOSLP are subsumed under the general diagnosis of schizophrenia in ICD-10 and DSM-IV. Debate continues as to whether LOS and/or VLOSLP represent pathological entities distinct from early-onset adult schizophrenia. The average GP could, however, go for 3 years or longer without seeing a case of LOS or VLOSLP.[3] Yet clinicians generally agree that a distinct pattern of symptoms is present in patients who first develop schizophrenic illness in later life (Box 1 and Box 2).

Box 1: Similarities and differences between early- and late-onset schizophrenia

Similarities
- Genetic risk
- The presence and severity of positive symptoms
- Early psychosocial maladjustments
- Subtle brain abnormalities revealed by imaging

Differences
Late-onset schizophrenia is characterised by:
- Fewer negative symptoms
- Better neuropsychological performance
- Better response to antipsychotics
- Preservation of personality

Box 2: Characteristic features of very-late onset schizophrenia (VLOSLP)

Compared with early- or late-onset schizophrenia, very-late-onset schizophrenia is characterised by:
- Associated sensory impairment
- Social isolation
- A greater likelihood of visual hallucinations
- Lesser likelihood of formal thought disorder
- A lesser likelihood of affective blunting
- A lesser likelihood of family history of schizophrenia
- A greater risk of developing tardive dyskinesia
- The significantly higher number of females affected than males

Differential diagnosis

Psychotic symptoms in the elderly are not necessarily indicative of schizophrenia, particularly if of new onset. Common causes include: mood disorder, dementia, delirium, age-related deterioration of frontal and temporal cortices, neurochemical changes associated with ageing, social isolation, sensory deficits, age-related pharmacokinetic and pharmacodynamic changes, and polypharmacy.[4] A good knowledge of the patient's history, competent mental state examination and appropriate medical checks are necessary to differentiate between them. The development of comorbid medical conditions commonly complicates the effectiveness of diagnosis and treatment.

Comorbidity

Comorbidity adversely affects the course of schizophrenia. Its recognition is important for several reasons:
- Many cases are missed due to underreporting and cognitive deficits
- Cardiovascular disease and diabetes may be more prevalent as in those with chronic mental illness
- Illnesses may be more severe than their age peers
- Impediments to care exist due to barriers in the health care system, social support and physician's attitudes, patients are often "lost" to follow up
- Chemical abuse among older adults has likewise received little attention
- Noncompliance with treatment regimes may be high.

Outcome in schizophrenia

There is limited data about the course of schizophrenia in later life. Some studies have found progressive deterioration while others have suggested improvement with age or a stable course. This reflects the heterogeneous nature of the illness with variable outcomes in different cases.[5] Recent studies have shown that the majority continue to experience symptoms, with positive symptoms becoming less and negative and cognitive impairments more severe.[2]

Confounders include depression, demoralisation, side effects of medication and social deprivation, which are remediable if recognised and treated expeditiously. Tackling social isolation with the resources of the multidisciplinary team is an important part of treatment.[3]

Medical management

Treatment is mainly with antipsychotics, but is based on clinical data extrapolated from studies in younger populations. The Cochrane database of systematic reviews (2003) stated that there was no trial based evidence upon which to base guidelines for older people and highlighted the need for good quality clinical trials to address this issue.[6] Until then prescribing will be guided by clinical judgement and it should be tailored to the needs of the individual.

The safest way is to start low and go slow

Atypical antipsychotics are currently considered the first-line treatment due to their better side-effect profile in comparison to conventional antipsychotics. Unfortunately there have been regulatory warnings over the increased risk of stroke, cardiac related morbidity and mortality, diabetes and metabolic syndrome. The Committee on Safety of Medicines (CSM) guidelines (2004) do not recommend their use in patients with a history of cerebral vascular accidents (CVAs) or transient ischaemic attacks (TIAs) and only with caution in cases of cerebrovascular risk factors (eg. hypertension, diabetes, smoking and atrial fibrillation).[7] After warnings were issued for atypicals, this led to concerns that physicians may switch to prescribing conventional antipsychotics. Although atypical antipsychotics have been associated with an increased risk of CVA in patients with dementia, there is no evidence that this is the case in LOS and VLOSLP.[3]

With regard to use of older antipsychotic drugs, the UK presented a request to the European Medicines Agency for a committee for medicinal products for human use (CHMP) assessment report on conventional antipsychotics.[8] They recommend the following:

- These drugs are also associated with increased mortality
- This is no clear evidence to suggest that mortality is more on comparison with atypicals
- Increased risk applies to all members of this class
- The need to conduct further studies.

Overall, it is advisable for diagnosis and initiation and modification of treatment, combined with expert follow up, to remain the remit of secondary rather than primary care services.

Cognitive deficits

Cognitive deficits are recognised as being integral to the syndrome of schizophrenia and are increasingly recognised as a major determinant of outcome as they are the strongest predictors of functional capacity. The overall nature and course of cognition seems to be heterogeneous and these findings differ from Alzheimer's dementia where there is a global pattern of deterioration of cognitive functioning.

In a systematic review cross-sectional studies have shown that in late life schizophrenia there is consistent impairment in executive function, visuospatial ability and verbal fluency but less impairment in memory, attention, and working memory.[9] This impairment has had an impact on community and social adaptive functioning.[10]

No evidence based treatments are as yet available

The newer atypical antipsychotics have limited positive effect on cognitive defects and acetylcholinesterase inhibitors may be of benefit but are not licensed. Of these galantamine looks the most promising. This may be due to its different pharmacological properties as it also potentiates the actions of nicotinic receptors in the presence of acetylcholine.[11]

Legislation and safeguards

Most patients are either living with variable degrees of support in the community or residing in nursing homes or care homes after being discharged from hospitals. Several recent introductions to legislation will affect these patients. They include:

- Amendments made to the Mental Health Act in 2007. This covers the criteria which must be met before a patient can be deprived of their liberty and forced to undergo treatment
- The Mental Capacity Act 2005 deals with the ability of all patients to control their affairs in general and their medical treatment regardless of whether they are mentally or physically ill
- The Deprivation of Liberty safeguards (DoLS), which provide legal protection for those people who are deprived of their liberty other than under the Mental Health Act who lack capacity to consent to care or treatment and who are suffering from a disorder of the mind.

These safeguards came into effect from 1 April 2009.

Transfer of care of graduate patients

Graduate is used to describe people with severe psychiatric disorders who have graduated into old age. There have been concerns that mental health services are not targeting the wants and needs of this

population. Different services have different policies of dealing with their needs. Some continue to be looked after by adult services and some by old age psychiatry services. The tools for assessment of needs have only been validated in younger adults and not in older adults and is more sensitive to their social rather than their medical needs. Uncertainty about responsibility of care could lead to serious shortcomings in care.[12] In another study, it was seen that the characteristics and problems differ significantly in this age group from the younger mentally ill. This would reflect the need for a needs assessment procedure particularly designed and validated for the elderly that will be more sensitive to their physical and special needs.[13]

Conclusion

Advances continue to be made in the diagnosis and treatment of schizophrenia but there is, as yet, no consensus as to the safest and most effective pharmacological treatment of schizophrenia and associated comorbid conditions in the elderly. What is clear is that closer multidisciplinary working within health services and between health and other providers will be essential, especially in the context of newly introduced legislation if this patient group is to access the treatment it requires and deserves.

Conflict of interest: none declared

Useful web sites

Code of practice: Mental Health Act 1983 (revised 2008)
www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_084597

Mental Capacity Act 2005 Code of Practice
www.dca.gov.uk/legal-policy/mental-capacity/mca-cp.pdf

Deprivation of Liberty Safeguards Code of Practice to supplement the main Mental Capacity act 2005 Code of Practice
www.publicguardian.gov.uk

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