Psychotic symptoms in the elderly

Assessment and management

BACKGROUND
Psychotic symptoms in the elderly arise in mood disorders, schizophrenia, dementia, and delirium.

OBJECTIVE
This article provides a brief overview of the presentation and management of each condition.

DISCUSSION
Management follows logically from a thorough mental state examination, medical work up and accurate diagnosis. Depression and mania with psychotic symptoms respond best to an antidepressant and mood stabiliser respectively, usually in combination with antipsychotic medication. Severe cases require electroconvulsive therapy. Atypical antipsychotics are now the treatment of choice in late life schizophrenia. Psychotic symptoms are common in dementia but usually fade within 6–12 months. Doses of psychiatric medications should therefore be lowered every 3 months to check that continued treatment is necessary. Most cases of delirium do not require psychiatric medication.

Psychotic symptoms arise in the elderly in four clinical situations: mood disorder (either depression or mania), schizophrenia (either early onset or late onset), dementia, and delirium. As comorbidity rises in frequency with age, general practitioners will encounter complex combinations of disorders (eg. dementia complicated by delirium, or schizophrenia complicated by dementia). Disentangling these presentations requires a good knowledge of the patient's history, a competent mental state examination, and appropriate medical work ups (Table 1).

Mood disorders

Depression
Small numbers of profoundly depressed older people develop delusions of poverty, physical illness, or criminal activity. Hallucinations of derogatory voices are rare. Depressive psychosis is typically accompanied by an obviously lowered mood, great anxiety and agitation, reluctance to eat and drink, self neglect, and insomnia. Most patients have a past history of depression or puerperal psychosis. Precipitants include personal trauma, physical illness and certain medications (eg. corticosteroids and antiparkinsonian medications).

Management
Admission to hospital is required to prevent self harm and to ensure adequate hydration and nutrition. Treatment comprises either electroconvulsive therapy and/or a combination of antipsychotic and antidepressant medications. These medications should be continued for at least 1 year. Patients with relapsing depressive psychoses require life long combined pharmacotherapy. Antidepressants very occasionally trigger mania. If this happens, the antidepressant should be stopped immediately.

Mania
Manic older patients are typically more irritable than euphoric. Some have delusions of heightened personal, financial and sexual prowess, but most are simply officious, intrusive and overly critical. Severely disordered patients present with such pressure of speech and disordered thinking that they look to be delirious.

Pointers to mania include a past history of bipolar disorder; an obviously altered mood; and deterioration in mental state over weeks rather than years (as in dementia) or days (as in delirium). Mania occasionally develops for the first time in old age, usually in a setting of cerebrovascular disease or other neurodegenerative conditions.

Management
When caught early, treatment with a mood stabiliser is sufficient (eg. sodium valproate in doses up to 800 mg...
An antipsychotic medication is added in severe cases. Continuing prophylaxis with a mood stabiliser is recommended. Sodium valproate is preferred to lithium carbonate in the very elderly as the latter can precipitate tremor, ataxia, and confusion at so-called ‘therapeutic’ blood levels.

### Schizophrenia

#### Early onset schizophrenia

Most elderly people with schizophrenia have been unwell for many decades and have multiple disabilities including some or all of the following:
- **positive psychotic symptoms** (e.g. delusions, hallucinations, disordered thought form)
- **negative psychotic symptoms** (e.g. apathy and inertia)
- **cognitive impairment** (e.g. impaired attention, memory and judgment)
- **the adverse effects of antipsychotic medications** (e.g. sedation, akathisia, tardive dyskinesia)
- **the sequelae of long term residence in dispiriting long stay hospital wards or residential facilities**
- **loss of contact with family and friends as a result of institutionalisation, carer burnout or attrition.**

#### Management

Elderly people require lower than usual daily doses of antipsychotic medications (e.g. haloperidol 1–2 mg, risperidone 1–2 mg, olanzapine 2.5–10 mg, and quetiapine 200–800 mg). Higher doses require specialist assessment.

Newer antipsychotics are safer, and patients can usually switch safely over a period of weeks from typical to atypical preparations. Changes to established treatments must be discussed beforehand with patients, their carers, and mental health specialists. Patients who remain well on an older medication and have few if any side effects, can be left as they are if they prefer.

The goal of treatment is to maximise independence and social engagement by means of carer support and education and through referral to disability support services and day care centres. Undetected medical illness is common. Many patients smoke, have a poor diet, and are slow to report new symptoms. Strategies to combat this include an annual physical check up, laboratory screen (including blood glucose and lipid levels for patients on atypical antipsychotics), and a chest X-ray for smokers, coupled with assertive treatment of new medical and surgical conditions.

#### Late onset schizophrenia

Schizophrenia occasionally presents for the first time in old age. Paranoid delusions, usually accompanied by auditory hallucinations, emerge in a clear state of consciousness over a period of weeks or months and cause dramatic disruption to patients, their families and neighbours (e.g. through complaints of harassment by means of noise, lights, smells, and poison gas). Antipsychotic medications often give excellent symptomatic control but must be taken indefinitely.

### Dementia

About half of all people with Alzheimer disease develop psychotic symptoms at some point in their illness. These symptoms typically arise in the middle to late stages of the condition and persist for several months. Beliefs that stem directly from forgetfulness and disorientation (e.g. a fear that a misplaced wallet has been stolen) should not be labeled ‘psychotic’, provided the fear subsides quickly once the wallet is retrieved.

Delusions are typically simple, unelaborated assertions that property has been stolen by an intruder, that a house is occupied by a phantom visitor or that a spouse is an impostor. Hallucinations are mostly visual, but can present in other modalities.

Dementia due to cortical Lewy bodies, which accounts for 5–10% of cases in older age groups, is associated with lengthy, elaborated, cinematic type visual hallucinations that can prove most alarming. Other pointers to Lewy body dementia include patchy forgetfulness, unexplained fluctuations of level of arousal, and evidence of parkinsonism (e.g. reduced shoulder swing and a shuffling gait).

Delusions, hallucinations and behavioural disturbance often cluster together. They distress patients and carers, and greatly increase the likelihood of admission to residential care. Management includes the following steps:
- exclude delirium (see below)
- correct visual impairment and deafness (both are risk factors for hallucinations)
- give accurate information to caregivers, and
- use reassurance, distraction and one-to-one company as first line strategies.

#### Management

Antipsychotic medications should be reserved for patients whose symptoms are frequent, persistent and distressing. Of all atypical antipsychotics, risperidone is the only one presently listed on the Pharmaceutical Benefits Scheme for the treatment of ‘behavioural and psychological symptoms of dementia’. Risperidone causes extrapyramidal side effects in high doses and might be associated with an increased risk of cerebrovascular symptoms and events in vulnerable individuals. Other typical and atypical medications still have a place for this reason (e.g. haloperidol 0.5 mg twice per day, olanzapine 2.5 mg twice per day, quetiapine up to 200 mg twice per day). As agitation, delusions and hallucinations mostly fade
Table 1. The commonest psychotic symptoms in various conditions and their standard medical treatment

<table>
<thead>
<tr>
<th>Condition</th>
<th>Psychotic symptoms</th>
<th>Medications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>Nihilistic, self denigrating and somatic delusions</td>
<td>ECT, antidepressants, antipsychotics</td>
</tr>
<tr>
<td>Mania</td>
<td>Grandiose delusions</td>
<td>Antipsychotics, mood stabilisers</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>Bizarre delusions, auditory hallucinations, disordered thought form</td>
<td>Antipsychotics</td>
</tr>
<tr>
<td>Dementia</td>
<td>Unelaborated delusions; complex visual hallucinations in Lewy body dementia</td>
<td>Antipsychotics (avoid typical antipsychotics in Lewy body dementia, use cholinesterase inhibitors)</td>
</tr>
<tr>
<td>Delirium</td>
<td>Simple visual hallucinations</td>
<td>Antipsychotics if necessary</td>
</tr>
</tbody>
</table>

Delirium

Delirium is an acute condition that results in either a quietly obtunded mental state or a floridly agitated confusional episode with delusions, illusions and hallucinations (or both at different times of the day). Delusions are mostly paranoid in nature; hallucinations are usually visual but can arise in all modalities. In one common scenario, patients pick at invisible objects on garments and bedcovers.

Precipitants include infection, metabolic disorders, hypoxia, stroke, surgery, drug toxicity and drug withdrawal. People with dementia are especially vulnerable to delirium, sometimes in response to urinary tract infections and other seemingly trivial conditions.

Delirium is sometimes the first pointer to an underlying dementia. When this happens, improvement is often incomplete – each episode of delirium results in a further downward step. It is important therefore, to prevent delirium wherever possible and to treat new episodes quickly.

Management

The first task is to identify responsible conditions and treat them. Agitation, delusions and hallucinations respond best to a familiar face, reassurance, orientation, adequate analgesia and hydration. Psychiatric medications can worsen confusion and should be prescribed only if other, simpler remedies prove insufficient.1

As treatment is short term, typical high potency neuroleptics still have a place. Haloperidol is calming but not too sedating for patients in cardiorespiratory failure and its relatively weak anticholinergic properties limit its propensity to worsen confusion. Its availability in oral, intramuscular and intravenous forms is a bonus. The frail elderly should not be given more than 2 mg per day. Alternatives include atypical antipsychotics and benzodiazepines.

Comorbid conditions

The elderly are more vulnerable to complex combinations of medical and psychiatric problems that require painstaking efforts to disentangle and manage appropriately. Below are some common scenarios:

- About 5–10% of dementias are complicated by major depression that presents principally with anxiety, agitation, insomnia, and poor appetite. It must be distinguished from the ‘sundowning’ that arises commonly in mid-stage dementia.
- Patients with dementia are especially vulnerable to delirium. Look for sudden changes in mental state and behaviour.
- If patients with long standing psychotic illnesses develop dementia, doses of antipsychotic medications may need to be reduced.

Conclusion

Being thoroughly familiar with the patient’s medical and psychiatric history, knowing the patient’s family carers, and consulting regularly with mental health workers assists greatly with the management of psychotic symptoms in the elderly. Changes in mental state and behaviour must be investigated quickly and comprehensively to forestall deterioration. It is imperative to preserve the mental and physical health of the patient so as to maintain their independence.

Conflict of interest: none declared.

References

2. Royal College of Psychiatrists Faculty for the Psychiatry of Old Age. Atypical antipsychotics and behavioural and psychiatric symptoms of dementia: prescribing update for old age psychiatrists. Available at www.rcpsych.ac.uk/college/faculty/oap [Accessed 6 November 2005].