



# Long-term management of people with psychotic disorders in the community

Nicholas A Keks, Professor, and Judy Hope, Psychiatrist, Monash University and Delmont Private Hospital, Melbourne

## Summary

**Psychoses affect up to 4% of the population. These conditions usually require long-term treatment with antipsychotic drugs, mood stabilisers or both. The availability of effective treatment means that most people with psychoses can live in the community. Psychosocial treatments and the provision of community services are critical, but are often inadequate. Long-term adverse effects can be a problem and adherence to treatment can be difficult for almost all patients. Depot antipsychotics have been widely used to improve adherence to maintenance treatment, but extrapyramidal adverse effects have been a major problem.**

Key words: antipsychotics, depot formulations.

(*Aust Prescr* 2007;30:44–6)

## Introduction

Psychoses include schizophrenia, schizoaffective disorder, psychotic depression and bipolar mania. The diagnostic boundaries between these disorders can be unclear, but together they have a lifetime prevalence in the population of about 4%. Antipsychotic drugs treat positive symptoms (delusions, hallucinations and thought disorder) across the diagnostic spectrum. Atypical antipsychotics are also helpful for mania and psychotic depression. Mood stabilisers are also used in psychoses to treat mania and depression, usually in addition to antipsychotic drugs.<sup>1</sup>

While up to 30% of patients do not experience any relapse after their first psychotic episode, the remainder will develop long-term problems. Some patients will manifest a remitting-relapsing pattern of illness, while others will develop chronic illness, including negative symptoms (flat affect, poverty of thought, amotivation, social withdrawal and poor concentration). Negative symptoms tend to be associated with poor insight into the presence of illness and the need for treatment. Adherence to treatment can therefore be particularly problematic.

Chronic or relapsing illness is associated with impaired function and lower quality of life. These patients require active rehabilitation and integration into the community.

## Long-term management in the community

Although many people with psychoses have a favourable outcome, others suffer unemployment, social and family dislocation and housing problems. Many patients with psychosis may require a comprehensive mix of services, which can be challenging to co-ordinate. Community psychiatric services may offer case management to assist with management planning and organisation. Specialist services provide specific psychological interventions (such as cognitive behavioural therapy for refractory psychoses) and vocational rehabilitation aimed toward functional recovery. Assertive community management (which involves proactive home visits, medication support and personal assistance) is recommended.

Almost all patients with psychoses living in the community will see a general practitioner; 81% do so in any given year. Often working together with specialist psychiatric services and social agencies, general practitioners can provide a number of key interventions.<sup>2</sup>

The physical care of patients with psychoses is a central role for general practitioners. These patients are at greater risk of

physical illness, particularly cardiorespiratory and metabolic disorders. General practitioners can regularly monitor patients' physical state, undertaking a number of relevant investigations every 6–12 months depending on individual requirements (Table 1).

**Good communication between the general practitioner and specialists is imperative**

In addition to monitoring the mental state for evidence of deterioration or relapse, general practitioners can provide supportive psychotherapy and counselling, monitor and encourage adherence to treatment, check for adverse effects and adjust the dose and type of medication in collaboration with a psychiatrist. They also liaise with family and carers, provide education about the illness, and recognise and address problems associated with substance abuse. Good communication between the general practitioner and specialists is imperative.

## Antipsychotic medications

Following the first psychotic episode, antipsychotic medication is usually stopped by the patient after 1–2 years, although

Table 1

**Monitoring the physical health of patients with psychosis \***

Assessment	Checks for:
History and examination, including: – cardiovascular – neurological – funduscopic exam through undilated pupils Weight: calculate body mass index (weight/height <sup>2</sup> )	– evidence of arrhythmias and ischaemic heart disease – tardive dyskinesia, akathisia and tremor – lens opacities and retinal pigmentation changes in weight
Random blood glucose	diabetes (increased risk with some atypical antipsychotics)
Cholesterol and triglycerides	cardiovascular disorders (increased risk)
Vitamin B <sub>12</sub> and folate	nutritional deficiency
Calcium, phosphate	drug effects
Full blood exam, erythrocyte sedimentation rate	infection, nutritional deficiency, anaemia
Liver function	alcohol and other drug effects
ECG	drug effects, cardiovascular disease
Drug screen	illicit drug use
Other investigations as appropriate, e.g. – thyroid function – therapeutic drug monitoring – echocardiography – cervical smear	– effects of lithium – effects of lithium – cardiomyopathy (clozapine)

\* suggested monitoring at initial examination and repeated at 6–12 month intervals depending on risk

long-term therapy is the rule for patients with recurrent illness. Antipsychotics prevent relapse in patients with remitted positive and mood symptoms, and maintenance treatment helps to reduce symptoms in patients with chronic illness. These drugs enable many patients who previously would have been institutionalised to live in the community.

The most commonly used conventional antipsychotics in the long-term treatment of psychoses are high-potency oral antipsychotics, such as haloperidol and trifluoperazine or depot formulations, such as flupenthixol. The major drawback with conventional antipsychotics is their tendency to produce extrapyramidal adverse effects at effective doses. These include dystonias, parkinsonism, akathisia and tardive dyskinesia, a disfiguring, stigmatising and often irreversible neurological disorder.

Atypical antipsychotics are a diverse group of drugs with a lower risk of extrapyramidal adverse effects at therapeutically effective doses. Some atypicals may be more effective than conventional antipsychotics in long-term treatment. Clozapine is particularly effective for treatment resistant cases. While its toxicity restricts initiation of treatment to specialist centres, increasingly general practitioners are involved in long-term care and monitoring of patients on clozapine therapy. Risperidone has shown superior efficacy to haloperidol in long-term

prevention of relapse.<sup>3</sup> Recently, high-dose olanzapine was shown to have greater effectiveness than conventional and other atypical antipsychotics (apart from clozapine) in terms of discontinuation rates over an 18-month period.<sup>4</sup>

While reducing problems with extrapyramidal adverse effects, atypicals have caused other problems such as postural hypotension, weight gain and hyperglycaemia. Each drug seems to have adverse effects which are particular problems, for example, clozapine can cause neutropenia, agranulocytosis and myocarditis. Olanzapine frequently causes considerable weight gain and increases glucose and lipids which can lead to hyperlipidaemia and diabetes.<sup>4</sup> Although weight gain is less of a problem with risperidone, it may cause sexual dysfunction and amenorrhoea due to hyperprolactinaemia. Quetiapine may cause mild weight gain, while amisulpride and aripiprazole are generally well tolerated in long-term treatment (although aripiprazole can initially cause troubling nausea and restlessness).

**Addressing adherence to treatment**

Education, cognitive behaviour therapy, social skills training, treatment of substance abuse, personal assistance and assertive community support are probably the most important measures in aiding adherence when medication is not fully effective in

re-establishing the patient's insight.<sup>5</sup> Depot formulations are widely used when psychosocial measures have been inadequate to ensure adherence to daily oral doses.

Depot antipsychotics take a long time to reach steady state, so oral supplementation is usually required in the first few months of treatment. Depending on the drug, the interval between injections can be extended to four weeks. Many patients receiving conventional depot antipsychotics experience extrapyramidal adverse effects, including a high prevalence of tardive dyskinesia.<sup>6</sup>

Risperidone is available in a long-acting injectable formulation. Initial findings and clinical experience suggest that injectable risperidone is effective for maintenance treatment of schizophrenia-related psychoses and causes relatively few adverse effects. The incidence of new cases of tardive dyskinesia has been low to date, but weight gain, amenorrhoea and sexual dysfunction do occur.

## Conclusion

The long-term treatment of psychosis is challenging. General practitioners have a key role, particularly in the ongoing physical care of patients and in monitoring medication and the patient's mental state. Adherence to treatment is a frequent problem, which can be addressed with intensive psychosocial assistance. More often than not, services are less than adequate, and other measures such as long-acting injectable antipsychotic drugs may be required to ensure that patients continue their medication.

## References

1. Freedman R. Drug therapy: schizophrenia. *N Engl J Med* 2003;349:1738-49.
2. Csernansky JG, Mahmoud R, Brenner R. A comparison of risperidone and haloperidol for the prevention of relapse in patients with schizophrenia. *N Engl J Med* 2002;346:16-22.
3. Charles J, Miller G, Ng A. Management of psychosis in Australian general practice. *Aust Fam Physician* 2006;35:88-9.
4. Lieberman JA, Stroup TS, McEvoy JP, Swartz MS, Rosenheck RA, Perkins DO, et al; Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) Investigators. Effectiveness of antipsychotic drugs in patients with chronic schizophrenia. *N Engl J Med* 2005;353:1209-23.
5. Mueser KT, McGurk SR. Schizophrenia. *Lancet* 2004;363:2063-72.
6. Hope JD, Keks NA, Sacks TL, Freer T. Abnormal involuntary movements in people with schizophrenia in the community. *Med J Aust* 1999;171:111-12.

*Professor Keks has received research funding from, or has been a consultant to, all pharmaceutical companies marketing atypical antipsychotic drugs in Australia.*

## Self-test questions

*The following statements are either true or false (answers on page 55)*

5. Atypical antipsychotics do not cause tardive dyskinesia.
6. Up to 30% of patients have no relapses after their first psychotic episode.

## Book review

### Therapeutic Guidelines: Gastrointestinal. Version 4.

**Melbourne: Therapeutic Guidelines Limited; 2006. 272 pages. Price \$39, students \$30, plus postage**

*Aniello Iannuzzi, Visiting Medical Officer, Coonabarabran Hospital, NSW*

Therapeutic Guidelines: Gastrointestinal highlights that this series is about **therapeutic** guidelines, rather than just medication guidelines. It is suitable for all health professionals. Students and junior clinicians will find more than they need to pass exams and survive on the wards. The succinct and up-to-date information in this book will appeal to senior clinicians.

Many of the therapies described in this guide are non-prescription, making it a useful resource for pharmacists and dietitians. It is a wake-up call for medical practitioners, reminding us that prescribing drugs is not the only way to solve clinical problems.

Basic day-to-day problems are dealt with comprehensively, namely constipation, nausea, vomiting and diarrhoea. All clinicians, irrespective of their specialties, will find useful information in these chapters.

The first section, 'Getting to know your drugs', is a 25-page pharmacology revision of all the gastrointestinal drugs of importance. The only oversight was dexamethasone, which is subsequently referred to a lot in the nausea and vomiting chapter.

The other chapters deal with all the important non-surgical conditions of the gastrointestinal tract. These include viral hepatitis, *Helicobacter pylori*, diverticular disease, irritable bowel syndrome, as well as disorders of vitamin and mineral metabolism. There are also useful sections dealing with enteral nutrition and stoma management. This book contains many practical tables as well as appendices relating to pregnancy, ostomy appliances and support groups.

It is a handy pocket-sized book which is also available in an electronic format with the other guidelines in the series. I strongly recommend this book to all clinicians.