

## ATYPICAL ANTIPSYCHOTICS – BETTER, BUT NOT PERFECT

1

- ▶ MANAGE METABOLIC SYNDROME
- ▶ MONITOR FOR ADVERSE EFFECTS AND MANAGE EARLY
- ▶ UNDERSTAND THAT THERE ARE SOME POTENTIALLY SERIOUS ADVERSE EFFECTS
- ▶ TAKE CARE IF THERE IS A RISK OF DELIRIUM

Atypical antipsychotics have mostly replaced the older 'typical' antipsychotics for treating schizophrenia, bipolar disorder, and other severe mental illness. Typical antipsychotics are more likely to cause adverse effects, particularly extrapyramidal symptoms.

Atypical antipsychotics include **amisulpride, aripiprazole, olanzapine, paliperidone, quetiapine, risperidone, and ziprasidone**. **Clozapine** is also an atypical antipsychotic which has a specific adverse reaction profile and higher risks associated with its use (visit [www.saferx.co.nz](http://www.saferx.co.nz) to view the clozapine bulletin for more information).

There is a great variability of individual response with all antipsychotics. In general, start at a low dose and carefully titrate upwards; adverse effects are often dose-related. Combinations should be avoided (unless during switching) due to the increased risk of adverse effects.

Some adverse effects require careful monitoring and management, and some can be serious such as diabetes, stroke and cardiac death. Be cautious when prescribing these medicines to older adults, and people with cardiovascular risk factors such as obesity, diabetes or high cholesterol.

### MANAGE METABOLIC SYNDROME

An increase in body weight, hyperglycaemia and type 2 diabetes have been observed in people taking atypical antipsychotics. The risk is greatest with **clozapine** and **olanzapine**, but cases have also been reported with **risperidone** and **quetiapine**. The risk of metabolic syndrome appears to be lower with **amisulpride, ziprasidone** and **aripiprazole**.

Provide advice about diet and lifestyle interventions, monitor for the emergence of diabetes and check lipid levels regularly.

### MONITOR FOR ADVERSE EFFECTS AND MANAGE EARLY

#### Cardiovascular effects

Typical and atypical antipsychotics have an increased risk of sudden cardiac death and stroke; everyone taking these medicines should have an annual cardiovascular disease risk assessment. People with at high risk of cardiovascular

disease may require an ECG prior to initiating treatment.

Atypical antipsychotics can prolong the QT interval and lead to ventricular tachyarrhythmias particularly with **ziprasidone** and to a lesser extent with **risperidone** and **aripiprazole**. Tachycardia has been observed with **risperidone, olanzapine, quetiapine**. Postural hypotension can occur with **risperidone, olanzapine** and **quetiapine**.

#### Movement disorders

Typical antipsychotics should never be prescribed to people with Parkinson's disease and atypicals should be used very cautiously. Higher doses of **risperidone** and **amisulpride** are associated with Parkinson-like adverse effects. **Risperidone, amisulpride, aripiprazole** and **olanzapine** may cause akathisia (including agitation and restlessness).

Atypical antipsychotics are less likely to cause tardive dyskinesia, but it can occur in up to 3% of people taking **risperidone** and can be irreversible.

#### Sexual dysfunction

Sexual dysfunction is one of the main causes of non-adherence to antipsychotic medicines, especially with **Risperidone**. Dose reduction or switching medicines may be necessary. The antipsychotic medicines with the lowest risk of sexual dysfunction appear to be **aripiprazole, ziprasidone** and **quetiapine**.

#### Other side effects

Anticholinergic effects such as constipation and blurred vision can occur particularly with **clozapine** and **olanzapine**. Sedation has been associated with **clozapine, olanzapine** and **quetiapine**. Mood or behaviour changes (eg, anxiety, irritability, in extreme cases suicidal thoughts and self-harm) can occur with people taking these medicines; advise them and their caregivers to report any concerns.

→ continued

## ▶ ATYPICAL ANTIPSYCHOTICS

2

### UNDERSTAND THAT THERE ARE SOME POTENTIALLY SERIOUS ADVERSE EFFECTS

#### Neuroleptic Malignant Syndrome (NMS)

This is a rare but potentially fatal adverse effect of all antipsychotic medicines. It is more common in young men taking higher doses and is often associated with hot weather and exercise. Symptoms include muscular rigidity, pyrexia, confusion, urinary incontinence, disorientation, tachycardia and sweating. Patients require urgent assessment, the medicine stopped and supportive treatment provided. All antipsychotics are associated with raised hepatic enzymes and blood dyscrasias. Arrange blood counts if unexplained infection or fever develops.

#### TAKE CARE WITH BEHAVIOURAL AND PSYCHOLOGICAL SYMPTOMS OF DEMENTIA (BPSD)

There is an increased risk of mortality and an increased risk of stroke in people with dementia who are prescribed antipsychotic medicines. Older people are also more susceptible to postural hypotension, hyperthermia and hypothermia. Initiate treatment with half the adult dose or less and review for the emergence of adverse effects regularly.

#### OFF-LABEL PRESCRIBING

Atypical antipsychotics are frequently prescribed for anxiety, and have also been used for sedation and post traumatic stress disorder. These indications are 'off-label' so the prescriber needs to discuss the decision to prescribe with the patient (and their family), **obtain consent and document** this in the patient's notes. Be aware that there is still limited documented evidence to support off-label use.

#### KEY REFERENCES

1. New Zealand Formulary, Antipsychotic Drugs [www.nzf.org.nz/nzf\\_2098.html](http://www.nzf.org.nz/nzf_2098.html) (Accessed 16-04-18)
2. Monasterio E, McKean A. Prescribing atypical antipsychotics in general practice. Best Practice Journal 2011; 40:14-23 [www.bpac.org.nz/BPJ/2011/november/docs/bpj\\_40\\_antipsychotics\\_pages\\_14-23.pdf](http://www.bpac.org.nz/BPJ/2011/november/docs/bpj_40_antipsychotics_pages_14-23.pdf) (Accessed 16-04-18)
3. Romans S, McKean A. Bipolar disorder: Identifying and supporting patients in primary care. Best Practice Journal 2014;62:6-17 [www.bpac.org.nz/BPJ/2014/July/bipolar.aspx](http://www.bpac.org.nz/BPJ/2014/July/bipolar.aspx) (Accessed 16-04-18)

#### MONITORING RECCOMENDATIONS

Parameter	Frequency	Comments
Full Blood Count	Initially then annually	
Urea and Electrolytes	Initially then annually	
Liver Function Test	Initially then annually	Not required for amisulpride
Lipid profile	Initially, at 3 months and annually	Clozapine or olanzapine, monitor every 3 months for the first year, then annually
Weight	Initially, regularly during first 3 months, then annually	Clozapine or olanzapine, monitor every 3 months for the first year, then annually
Fasting Blood Glucose	Initially, at 4-6 months, then annually	Clozapine or olanzapine, also test after
ECG	Initially if risk factors	Refer to individual datasheets
Blood Pressure	Initially and during dose titration	
Prolactin	Initially, at 6 months, then annually if clinical concerns	For higher risk medicines (amisulpride, risperidone) or if clinical concerns
CVD Risk Assessment	Annually	For everyone with schizophrenia

#### ACKNOWLEDGEMENTS

We would like to thank Ariel Hubbert and Keith Crump, Mental Health Pharmacists at Waitemata District Health Board, for their valuable contribution to this bulletin.

[CLICK HERE FOR FURTHER INFORMATION ON ATYPICAL ANTIPSYCHOTICS AND A FULL REFERENCE LIST](#)

▶ For further information on other high-risk medicines visit our website at : [www.saferx.co.nz](http://www.saferx.co.nz)