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Waitemata District Health Board
Best Care for Everyone

ATYPICAL ANTIPSYCHOTICS - SAFE PRESCRIBING - BETTER, BUT NOT PERFECT

- BE AWARE OF METABOLIC SYNDROME; IT IS THE MOST IMPORTANT CLINICAL PROBLEM
- MONITOR FOR ADVERSE EFFECTS AND MANAGE EARLY
- UNDERSTAND THAT THERE ARE SOME POTENTIALLY SERIOUS ADVERSE EFFECTS
- TAKE CARE WITH PATIENTS AT RISK OF DEMENTIA

Atypical antipsychotics have mostly replaced the older 'typical' antipsychotics because they are more effective for treating the negative symptoms of schizophrenia, and have better patient acceptability.

Atypical antipsychotics include **risperidone** (Risperdal®), **olanzapine** (Zyprexa®), **quetiapine** (Quetapel®, Seroquel®), **amisulpride** (Solian®), **aripiprazole** (Abilify®) and **ziprasidone** (Zeldox®). **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 to view the clozapine bulletin for more information).

There is a large variability in individual patient response with these medicines. 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 an increased risk of adverse events.

BE AWARE OF METABOLIC SYNDROME; IT IS THE MOST IMPORTANT CLINICAL PROBLEM

An increase in body weight, hyperglycaemia and type 2 diabetes has been observed in some patients 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**.[6,7]

All patients prescribed antipsychotics, regardless of risk factors, should be given advice on diet and lifestyle interventions, monitored for the emergence of diabetes, and have lipid levels checked.

MONITOR FOR ADVERSE EFFECTS AND MANAGE EARLY

Cardiovascular effects

Current users of typical or atypical antipsychotics have an increased risk of sudden cardiac death compared with non-users, and former-users of such medicines. Atypical antipsychotic medicines can prolong the QT interval and lead to ventricular tachyarrhythmias. Prolongation of QT interval has been observed mostly with **ziprasidone**, and to a lesser extent with **risperidone** and **aripiprazole**. Tachycardia has been observed with **risperidone**, **olanzapine**, **quetiapine**, and less so with **ziprasidone**.

An increased risk of stroke has been associated with all antipsychotic medicines. Patients with pre-existing cardiovascular disease or cardiovascular risk factors may require an ECG prior to initiating treatment with antipsychotic medications. All patients with schizophrenia should have an annual cardiovascular disease risk assessment.

Postural hypotension and hypertension

Postural hypotension can occur when initiating or up-titrating **risperidone**, **olanzapine**, and **quetiapine**. Ensure that older patients and their caregivers are informed of the increased risk of falls. There have also been cases of severe hypertension leading to collapse following **risperidone** use.

Movement disorders

'Typical' antipsychotics should never be used in patients with Parkinson's disease; atypical agents should be used very cautiously due to the potential exacerbation of symptoms. Higher doses of **risperidone** and **amisulpride** are associated with tremor, muscular rigidity and acute dystonia. **Risperidone**, **amisulpride** and **olanzapine** may cause akathisia (including agitation and restlessness).

Although new-onset tardive dyskinesia is less likely to occur with atypical, compared with typical antipsychotics, it can occur in up to 3% of patients taking **risperidone**.

Other adverse effects

Anticholinergic effects such as dry mouth, constipation and blurred vision can occur particularly with **clozapine** and **olanzapine**. Sedation has been especially associated with **clozapine**, **olanzapine** and **quietiapine**.

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

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ATYPICAL ANTIPSYCHOTICS

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 medications. It is more common in young male patients taking higher doses and is often associated with hot weather and exercise. It is also more likely to occur with **risperidone**. Symptoms include muscular rigidity, pyrexia, confusion, disorientation, tachycardia and increased sweating. Patients with these symptoms require urgent assessment, cessation of antipsychotics, and supportive treatment.

Please remember that like the older antipsychotics, atypicals are also associated with raised hepatic enzymes and blood dyscrasias. Arrange blood counts if unexplained infection or fever develops.

Weight gain

Weight gain is most common with **olanzapine**. If there is weight gain of over 2kg within the first 2 weeks of starting any atypical antipsychotic medicine, consider a change of agent.

Diabetes

People with schizophrenia have an increased risk of diabetes. Avoid **olanzapine** in particular if there are risk factors such as obesity or a family history of diabetes. Monitor all patients for symptoms of diabetes during treatment.

Lipids

If the patient has a pre-existing abnormal lipid profile, use atypical antipsychotic medications with caution. Monitor lipids during treatment for all patients.

TAKE CARE WITH PATIENTS AT RISK OF DEMENTIA

There is an increased risk of mortality and stroke in elderly patients with dementia who are prescribed antipsychotic medication. tart with half the adult dose, or less, and review for efficacy and the emergence of adverse effects at each visit. Antipsychotics are ineffective for wandering, social withdrawal, shouting, pacing, touching, or cognitive defects.

Note: Risperdone is the only atypical antipsychotic officially indicated for BPSD.

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 prescribers must discuss the decision to prescribe with the patient (and their family), obtain consent and document this in the patient's notes.

MONITORING RECOMMENDATIONS

Parameter	Frequency	Comments
Full Blood Count	Initially, then annually	
Urea and Electrolytes	Initially, then annually	
Liver Function Test	Initially, then annually	Not required for amsulpride
Lipid Profile	Initially, at 3 months, and annually	
Weight	Initially, regularly during first 3 months, then annually	If taking clozapine or olanzapine, monitor every 3 months for the rest of the first year
Fasting Blood Glucose	Initially, at 4-6 months, then annually	If taking clozapine or olanzapine, also test after the first month
ECG	Initially (if risk-factors present)	Refer to individual datasheets
Blood Pressure	Initially and during dose titration	Not mandatory for amisulpride and aripiprazole
Prolactin	Initially, at 6 months, then annually	Check sooner if indicated by clinical presentation
CVD Risk Assessment	Annually	For all patients with schizophrenia

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CLICK HERE FOR FURTHER INFORMATION ON ATYPICAL ANTIPSYCHOTICS AND A FULL REFERENCE LIST

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DISCLAIMER: This information is provided to assist primary care health professionals with the use of prescribed medicines. Users of this information must always consider current best practice and use their clinical judgement with each patient. This information is not a substitute for individual clinical decision making. Issued by the Quality Use of Medicines Team at Waitemata District Health Board, email: feedback@saferx.co.nz