Second-Generation Antipsychotic Tip Sheet

Second-Generation Antipsychotic Medications

- Risperidone/Risperdal
- Risperidone/Risperdal Consta
- Asenapine/Saphris
- Iloperidone/Fanapt
- Olanzapine/Zyprexa
- Paliperidone/Invega/Sustenna
- Ziprasidone/Geodon
- Clozapine/Clozaril
- Aripiprazole/Abilify
- Quetiapine/Seroquel

Medical Issues Related to Second-Generation Antipsychotic Usage in Adults[2,5]

Second-generation antipsychotics may cause abnormal blood work in adults such as:

- Elevated serum glucose
- Elevated serum lipid levels
- Increased prolactin levels

Conditions experienced may include:

- Weight gain
- Cardiovascular side effects
- Increased abdominal girth
- Increased risk of type 2 diabetes
- Diabetic ketoacidosis
- Sudden death in elderly

Monitoring Patients on Second-Generation Antipsychotic Medications

The American Diabetes Association, the American Psychiatric Association, the American Association of Clinical Endocrinologists, and the North American Association for the Study of Obesity recommend the following screening measures for monitoring patients using second-generation antipsychotics.[1]

Measure	Baseline	4-weeks	8-weeks	12-weeks	Annually
Personal/family history	X				X
Body Mass Index (BMI)	X	X	X	X	X
Waist circumference	X				X
Blood pressure	X			X	X
Fasting blood glucose	X			X	X
Fasting lipid profile	X			X	X

- *There is also a need to monitor prolactin levels in patients prescribed risperidone, at baseline and follow-up intervals.*
- *Encourage all patients on second-generation anti-psychotics to follow a healthy diet and engage in a rigorous exercise program.*

Both the psychiatric and medical communities have determined that the monitoring for metabolic side effects of second-generation antipsychotics is an important part of patient treatment. Continuing Medical Education courses are available for free on Web sites such as Medscape (www.cme.medscape.com).

The Potential Benefits[3] of Second-Generation Antipsychotic Medications:

- Prescribed for a wide variety of uses
- Much reduced neurological sequelae over older agents
- Much lower incidence of extrapyramidal symptoms
- Much lower incidence of tardive dyskinesia
- Increased effectiveness in treating the negative symptoms of schizophrenia

Issues Related to Use in Children

In 2004, Cooper et al. reported a doubling of the use of this class of medication in children enrolled in TennCare, the state of Tennessee's Medicaid program, for diagnoses other than schizophrenia or Tourette's syndrome. In this study, conducted from 1996 to 2001, the use of second-generation antipsychotics for ADHD, conduct disorder and affective disorders accounted for the doubled rate of use.[4] Careful consideration of the need for a second-generation antipsychotic, in addition to monitoring weight, serum glucose, lipid profile, and abdominal girth in this population, is imperative in children and adolescents.

Summary

- Second-generation antipsychotics should be used for approved indications
- Second-generation antipsychotics have significant metabolic side effects
- Monitoring can reduce the risk of metabolic side effects

These guidelines are not intended to replace a practitioner's clinical judgment. They are designed to provide information and to assist practitioners with decisions regarding care. The guidelines are not intended to define a standard of care or exclusive course of treatment. Health care practitioners using these guidelines are responsible for considering their patients' particular situations in evaluating the appropriateness of these guidelines.

1. American Diabetes Association; American Psychiatric Association; American Association of Clinical Endocrinologists; North American Association for the Study of Obesity. Consensus development conference on antipsychotic drugs and obesity and diabetes. Diabetes Care 2004; 27(2):596-601
2. Straker, D. et al. Cost-effective Screening for the Metabolic Syndrome in Patients Treated with Second-Generation Antipsychotic Medications. *American Journal of Psychiatry* 2005; 162:1217-1221.
3. American Psychiatric Association. Clinical Practice Guideline for Treating Schizophrenia 2004.
4. Cooper WO, Hickson GB, Fuchs C. *Archives of Pediatric and Adolescent Medicine* 2004; 158: 753-759.
5. Hales R, Yudofsky S. Textbook of Clinical Psychiatry 4th edition. Arlington, Virginia, American Psychiatric Publishing, Inc., 2006.