Monitoring Metabolic Risks of Antipsychotic Medications

Metabolic changes in individuals with schizophrenia who receive antipsychotic agents can contribute to the development of metabolic syndrome and increase the risk for type 2 diabetes mellitus and cardiovascular disease. Some antipsychotic treatments (i.e. olanzapine/Zyprexa) can cause significant increases in body weight and adiposity (4-10 kg). Increased adiposity has been associated with decreases in insulin sensitivity which may contribute to increases in plasma glucose concentrations and lipid levels\(^1\). Thus, it is important that metabolic functions and risk factors are systematically monitored.

Consensus guidelines from the American Diabetes Association, American Psychiatric Association, American Association of Clinical Endocrinologists and the North American Association of for the Study of Obesity recommend the following\(^2\):

- At baseline, assess the patient’s and/or family history of obesity, diabetes, cardiovascular disease, dyslipidemia, or hypertension.
- Assess and document the patient’s body mass index at baseline, at 4, 8, and 12 weeks, and at least every 3 months thereafter, or more often as indicated.
- Assess and document the patient’s fasting glucose, fasting lipid profile, and blood pressure at baseline and after 3 months of treatment. If the results are normal after 3 months of treatment, glucose and blood pressure monitoring is recommended annually. If the lipid profile is normal after 3 months, follow-up monitoring is recommend at least every 5 years.

Children and adolescents prescribed concurrent antipsychotics are at high risk for developing metabolic syndrome. There is a lack of evidence supporting concurrent use. Because of this, guidelines caution against their use\(^3\). Additionally, the use of multiple concurrent antipsychotics in children and adolescents is a HEDIS measure for quality of care\(^4\).