

Monitoring Lipids in Patients Prescribed Atypical Antipsychotics: The Ideal and Reality

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Ideal Practice

About 5 to 7 years ago, metabolic changes associated with use of atypical antipsychotic agents began being investigated and identified. This led, in 2004, to the FDA requesting manufacturers of atypical antipsychotics to add a warning regarding the risk of hyperglycemia and diabetes to their prescribing information.¹

Around the same time, joint consensus recommendations from four key national organizations—the American Diabetes Association, the American Psychiatric Association, the American Association of Clinical Endocrinologists, and the North American Association for the Study of Obesity—were developed to address the need for metabolic monitoring in patients prescribed atypical antipsychotics.^{2,3} Specifically, the recommendation was that “all patients receiving second-generation antipsychotics should have fasting blood glucose and lipid levels determined at baseline and after 12 weeks of treatment.”

More recently, a quality measure has been developed by the The STAndards for Bipolar Excellence (STABLE) Project that assesses the percentage of patients diagnosed with bipolar disorder and treated with an atypical antipsychotic agent who received at least one assessment for hyperlipidemia within the initial 16-week period of treatment.⁴

STABLE Performance Measure and Rationale for Measurement of Lipids

Measure

Percentage of patients diagnosed with bipolar disorder and treated with an atypical antipsychotic agent who received at least one assessment for hyperlipidemia within the initial 16-week period of treatment

Rationale

- Several sets of metabolic monitoring guidelines for persons taking antipsychotic medications are currently recognized (Mount Sinai; Australia; ADA/APA; Belgium; United Kingdom)
- Five groups unanimously recommend measuring fasting lipids (with the United Kingdom group being silent on the issue)
- Adequate fasting is necessary to obtain valid LDL and triglyceride levels
- Although baseline monitoring is indicated as soon as feasible, when it is possible, monitoring prior to antipsychotic treatment initiation is preferable as the results may influence antipsychotic choice, especially when elevated risk factors are identified

Note: AstraZeneca LLP, Wilmington, Delaware, provided financial sponsorship for the STABLE Project. They did not otherwise participate in the development of either the measures or toolkit.

Actual Practice

Studies suggest that lipid monitoring in patients being treated with atypical antipsychotic agents is underperformed.

- A 1998–2003 study in a Medicaid cohort revealed that fewer than 10% of adult patients starting therapy with a second-generation antipsychotic had had baseline lipid determinations. Children and adolescents were even less likely to be tested.⁵

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- A study published in 2009 in the *American Journal of Psychiatry* used data mined from the PharmMetrics database for patients under the age of 65 years with a prescription claim for aripiprazole, olanzapine, quetiapine, risperidone, or ziprasidone.⁶ Results indicate that lipid testing in patients newly prescribed an atypical antipsychotic was remarkably low, despite ADA-APA or FDA recommendations. The authors conclude that: “Clinicians and administrators responsible for the health of at-risk populations should implement new approaches for effective monitoring of major modifiable risk factors for medical morbidity and mortality in patients taking second-generation antipsychotics.”

Percentage of Patients Prescribed Antipsychotics Who Received Adverse Effect Testing

Test	July 2000 to October 2003	March 2004 to December 2006
Baseline lipid level	8.4	10.5
12-week lipid level	6.8	9.0

From Haupt DW, et al. *Am J Psychiatry* 2009;166:345-353.

In addition to uncovering evidence of the low screening and monitoring rates, the lead investigators for the 2 studies cited above assert some potential reasons for the problem:

- Many psychiatrists’ offices are not set up to do onsite blood draws
- Failure of many psychiatrists to consider these kinds of metabolic complications associated with mental illness and its treatment to be their responsibility
- Suboptimal ability by clinicians to interpret the findings of lab results

The Call to Action

National experts agree that such monitoring is being done at suboptimal levels. In a recent interview with Paul E. Keck, Jr., MD, Lindner Professor of Psychiatry & Neuroscience at the University of Cincinnati College of Medicine and President of the Lindner Center of HOPE, he stated that, “We definitely need to improve monitoring rates for hyperlipidemia [in patients with bipolar disorder]. It would be unthinkable for a mental health clinician to be prescribing lithium, but not getting lithium levels. We have got to ‘raise the bar’ regarding lipid monitoring in this patient population.”⁷

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References

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