

OBSERVATIONS

Diabetic Ketoacidosis Induced by Aripiprazole in a 12-Year-Old Boy

Aripiprazole is a relatively new atypical antipsychotic drug used to treat aggression, bipolar disorder, conduct and mood disorder, and Tourette's syndrome in children and schizophrenia-related mood disturbances in adults. It is believed to have fewer side effects such as weight gain, pancreatitis, and hyperglycemia (1,2). We report a 12-year-old boy who presented with diabetic ketoacidosis (DKA) due to Aripiprazole use.

A 12-year-old Caucasian boy with a history of intractable epilepsy, mental retardation, and mood disturbance presented to the emergency room with complaints of polyuria and polydipsia, decreased school performance for the previous 2 months, and increased irritability and behavioral changes for the previous few days. At presentation his blood glucose was 478 mg/dl, anion gap was 22, bicarbonate was 17, serum triglycerides were 286 mg/dl, and calcium was 9.5 mg/dl. Thyroid function tests were normal, and anti-GAD antibody was negative. No prior history of hyperglycemia was present. He was found to be in DKA and was treated appropriately with insu-

lin and intravenous fluids. His anion gap and blood glucose soon normalized. A review of his medications found that ~6 months prior to admission, he was started on Aripiprazole by a psychiatrist for mood disturbances. Since that time he began to gain weight and had complaints of polyuria and polydipsia. His present condition was attributed to Aripiprazole, which was discontinued.

We note that Aripiprazole is being prescribed more often than before in the pediatric population for mood disturbances in children with intractable epilepsy (3). Many possible mechanisms that can lead to diabetes with use of atypical antipsychotics have been proposed. The most important is insulin resistance due to weight gain caused by these drugs (4). Studies suggest that Aripiprazole has the lowest incidence of hyperglycemia and weight gain among the atypical antipsychotics (1,2). However, there have been few case reports on DKA induced by Aripiprazole, despite hyperglycemia being relatively common. Most of these reports are in adults with schizophrenia (5,6). This case highlights the importance of closely monitoring children on atypical antipsychotics for weight gain and hyperglycemia. We conclude that Aripiprazole can cause hyperglycemia and DKA in the pediatric population and that it is important for primary care physicians to monitor blood glucose periodically in these patients.

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