

represents common clinical practice among local psychiatrists. The rapid dose escalation may have contributed to the observed dystonia. Rapidly raising the dose of an antipsychotic is a known risk for acute dystonia (4). This side effect may be exceedingly rare because we noted no prior case reports of such in an adult.

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### Memantine and Catatonic Schizophrenia

TO THE EDITOR: The use of typical and atypical antipsychotics has provided marked improvement for many schizophrenic patients. Numerous patients, however, do not achieve full remission of symptoms, often having recurrent episodes. Several adjunctive therapies have been researched targeting the *N*-methyl-D-aspartic acid (NMDA) receptor (1). To our knowledge, this is the only case showing improvement in a patient with schizophrenia possessing catatonic symptoms in which the use of memantine has shown benefit.

Mr. A, a 56-year-old man with schizophrenia, was admitted after police discovered him wandering the streets responding to auditory hallucinations. His symptoms included mutism, staring, posturing, perseveration, stupor, and stereotypy (retrospectively assessed with the Bush Francis Catatonia Rating Scale, score=16) (2). His hospital course was prolonged because of partial response to olanzapine, haloperidol, ziprasidone, and risperidone. There were several psychotic relapses with polydipsia, staring, mutism, immobility, and somatic delusions. He was transferred several times between the acute care and extended care units.

Memantine, 5 mg/day, was started, ziprasidone was discontinued, and clozapine was initiated. The next day, Mr. A's symptoms improved greatly. He spoke more freely, and a feeling of his head being warm had subsided, as well as his preoccupation with drenching himself in baptismal fashion. His memantine and clozapine doses were titrated to 10 mg b.i.d. and 300 mg/day, respectively. His clozapine level was measured at 509 ng/ml.

Uncertainty as to the efficacy of memantine promoted its discontinuation 9 days after initiation. Mr. A's condition subsequently worsened, with a return of staring and soaking himself. Memantine was restarted, and his symptoms again significantly improved. Clozapine and memantine were continued, and his Bush Francis Catatonia Rating Scale score was 3, with automatic obedience.

Memantine is an NMDA receptor antagonist that is approved for use in moderate to severe Alzheimer's disease. Its

potential efficacy in schizophrenia may be due to blockade of hyperglutamatergic excitotoxicity in neurons. It is hypothesized that because of a pathological process in the brain, excess glutamate is produced (3). Excess glutamate causes hyperexcitation of glutamate receptors, allowing calcium channels to stay open for prolonged periods. Excessive calcium influx causes free radical damage to the neuron, eventually progressing to neuronal death.

A case report demonstrated the effectiveness of amantadine, an NMDA receptor antagonist with a structure similar to that of memantine, in a patient with schizoaffective psychosis and a Bush Francis Catatonia Rating Scale score of 31 (4). Based upon the effectiveness shown in this patient, memantine may be a useful adjunctive therapy for schizophrenic patients with catatonic symptoms.

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### Aripiprazole and Depression in Schizoaffective Disorder

TO THE EDITOR: Aripiprazole, the newest atypical antipsychotic, is reported to have a novel mechanism of action. It is a partial agonist at both the dopamine D<sub>2</sub> and serotonin 5-HT<sub>1A</sub> receptor and an antagonist at the 5-HT<sub>2A</sub> receptor (1). Its novel mechanism of action suggests that this drug may have unique therapeutic effects in some patients (2). We encountered a patient with chronic treatment-resistant depression who responded to a trial of aripiprazole.

Mr. A, a 54-year-old married white man, was diagnosed with schizoaffective disorder, bipolar type. He experienced an onset of manic symptoms and psychosis beginning at age 12. His psychotic symptoms persisted during periods of euthymia. His later depressive episodes became more chronic and severe, with significant suicidal ideation. He had had multiple hospitalizations for depression. His most recent manic episode had also required hospitalization. He had suffered from chronic depression that was unresponsive to numerous antidepressants, including adequate trials with venlafaxine, paroxetine, lamotrigine, and sertraline. He had additionally been treated with a series of atypical antipsychotics, including risperidone, ziprasidone, and quetiapine. When we assumed his care, he was receiving 160 mg/day of ziprasidone, 150 mg/day of sertraline, 300 mg/day of lamotrigine, and 2 mg/day of risperidone. Although his psychotic symptoms were controlled, he was depressed and functioning poorly.

Aripiprazole, 15 mg/day, was initiated and later increased to 30 mg/day. Risperidone and ziprasidone were tapered and discontinued. Mr. A experienced a progres-