Aripiprazole in a Patient Vulnerable to Side Effects

To THE EDITOR: Although the involvement of infection/inflammation in the pathogenesis of Tourette's syndrome has been discussed, antipsychotics are still the first choice in pharmacotherapy (1). Haloperidol and pimozide are well-established therapies (2), but increasing literature on this topic points out the advantages of atypical antipsychotics, at least regarding side effects (3, 4). Adherence to medication is a problem in Tourette's syndrome, often because of the side effects that patients experience. In the following, we describe a patient suffering from Tourette's syndrome who withdrew treatment from different neuroleptics, thus leading to severe social consequences for many years.

Ms. A, a 19-year-old patient, had suffered from motor and vocal tics since the age of 6. Her vocal tics included grunting, snorting, neighing, palilalia, and motor tics, such as beating and strangling herself. Additionally, she developed compulsions of washing and controlling. The course of her illness was chronic, not waxing and waning. She had experienced no tic-free interval during the last 13 years. Pharmacotherapy over the last years included 300 mg/day of tiapride, leading to an improvement of her motor tics only. Additional therapy with 300 mg/day of sulpiride first and 400 mg/day of amisulpride later each caused galactorrhea, without substantial therapeutic effect. Ms. A stopped taking both substances. Ms. A also stopped taking 4 mg/day of pimozide and later 80 mg/day of ziprasidone, each taken over several weeks; both caused amenorrhea and had only marginal effects on the tics.

Afterward, we started treatment with 10 mg/day of aripiprazole because of the side effect profile. In the first week, Ms. A's motor and vocal tics showed a marked improvement; after 2 weeks, Ms. A was nearly tic free for the first time in 13 years. Amenorrhea or galactorrhea was not present during the next months; other side effects, such as sedation or weight gain, did not occur. Ms. A started working as a waiter for the first time. The compulsions were much improved. Only a blinking tic, which exacerbated during stress, persisted.

Aripiprazole is an antipsychotic with partial dopamine antagonism and agonism, showing effects on serotonin $5-HT_{2A}$ and $5-HT_{1A}$ receptors. Its advantageous side effect profile has been described earlier (5); however, no effects in Tourette's syndrome have been observed. This case might encourage collecting not only further experience with aripiprazole in the treatment of Tourette's syndrome but in performing systematic studies in both short- and long-term therapy.

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Ziprasidone-Induced Acute Dystonia

To THE EDITOR: Ziprasidone is a second-generation antipsychotic that is reported to induce extrapyramidal side effects at a rate similar to that of placebo. The manufacturer's briefing document (1), presented to the U.S. Food and Drug Administration, provided data in which the Simpson-Angus Rating Scale and Barnes Rating Scale for Drug-Induced Akathisia showed no statistically significant decreases from baseline to endpoint between ziprasidone and placebo for either scale. We report extrapyramidal side effects induced in a man treated with ziprasidone for 4 days.

Mr. A, a 53-year-old man, was admitted to the inpatient psychiatry unit with a diagnosis of schizophrenia, paranoid type. He came to the Department of Veterans Affairs emergency room complaining of increased intrusiveness of auditory hallucinations and ideas of reference. Old charts revealed that his illness had been managed with oral risperidone, 3 mg b.i.d., for 3 years. Benztropine was prescribed for trismus during this interval. His risperidone dose was then decreased to 2 oral mg b.i.d., and an anticholinergic was no longer required. For 3 months before admission, Mr. A had traveled through several states and received no known antipsychotics.

Upon admission, the results of a comprehensive metabolic panel were found to be within normal limits, and a complete medical history and physical examination revealed a man without general medical conditions. He received oral ziprasidone, 40 mg b.i.d., for 1 day then 80 oral mg b.i.d.

Five 80-mg doses were given without untoward effects. Four hours after the sixth dose, Mr. A was in distress. He demonstrated a notable torticollis and dystonic posturing of his left carpus. Palpation of his musculature revealed spasm. Intramuscular diphenhydramine, 50 mg, was given, and contraction of his muscles was alleviated within minutes. Mr. A was observed for approximately 24 hours without reoccurrence and finally left the unit against medical advice and refused trials with other medications.

A PubMed search performed on April 2004 revealed only one report of ziprasidone-induced acute dystonia. Ramos et al. (2) reported an oculogyric crisis in a boy. No reports of acute dystonia in an adult were identified in our search. Acute dystonia appears as an oculogyric crisis 6% of the time and torticollis 30% of the time (3). In our vignette, the patient apparently had a dose-response induction of acute dystonia with risperidone: 3 oral mg b.i.d. mandated benztropine but 2 oral mg b.i.d. did not. The providers were aware of the manufacturer's recommended initial dose of ziprasidone, 20 oral mg b.i.d. with meals, with dose adjustments occurring at intervals of not less than 2 days. Nonetheless, the selected dose