probability scale of Naranjo et al., the case was ranked as a probable adverse drug reaction (5).

This case illustrates that the risk of developing extrapyramidal symptoms is still present, even with the newest of atypical antipsychotics. Clinicians should vigilantly monitor all patients for the emergence of symptoms, regardless of which antipsychotic a patient is receiving.

References

1. Gupta S, Masand P: Aripiprazole: review of its pharmacology and therapeutic use in psychiatric disorders. Ann Clin Psychiatry 2004; 16:155–166
2. Duggal HS: Aripiprazole-induced improvement in tardive dyskinesia. Can J Psychiatry 2003; 48:771–772
3. Sachetti E, Valsecchi P: Quetiapine, clozapine, and olanzapine in the treatment of tardive dyskinesia induced by first generation antipsychotics: a 124-week case report. Int Clin Psychopharmacol 2003; 18:357–359
4. Sajbel TA, Cheney EM, DeQuardo JR: Aripiprazole-associated dyskinesia. Ann Pharmacother 2005; 39:200–201
5. Naranjo CA, Busto U, Sellers EM, Sandor P, Ruiz I, Roberts EA, Janecek E, Domecq C, Greenblatt DJ: A method for estimating the probability of adverse drug reactions. Clin Pharmacol Ther 1981; 30:239–245

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Fatal Agranulocytosis 4 Years After Discontinuation of Clozapine

TO THE EDITOR: Clozapine is currently considered the most efficacious antipsychotic for the treatment of schizophrenic symptoms (1), but its use is limited because of the risk of agranulocytosis. Although the risk of this life-threatening adverse event is highest during the first 4 months of administration, it was recently reported that it can occur even after 11 years of continuous treatment (2). To our knowledge, it has not been reported that agranulocytosis can occur several months or even years after the discontinuation of clozapine. Here is the case of a mentally retarded patient who developed agranulocytosis after 7 years of clozapine treatment and then continued to suffer continuously from severe neutropenia, which developed into fatal agranulocytosis more than 4 years after the discontinuation of clozapine.

Mr. A was a 49-year-old man of Finnish origin who had been treated in a local nursing home because of behavioral problems associated with moderate mental retardation. Severe aggressive behavior was a major problem in his daily life; therefore, clozapine treatment was started. Clozapine, 450 mg/day, resulted in a marked reduction in his aggressive behavior, but it was discontinued because of agranulocytosis. Mr. A started to suffer from severe recurrent infections, and treatment with granulocyte-colony-stimulating factor gave only temporary benefits. His hematologist concluded that his blood dyscrasia was chronic because his total WBC count fluctuated from 0.5 to 1.5 $\times$ 10^9/liter (normal WBC count range=4.0–10.0 $\times$ 10^9/liter). At that time, it was decided to administer palliative treatment in the familiar environment of his nursing home. Mr. A's prognosis did not improve, and he died a few weeks later. A forensic autopsy concluded the cause of death to be clozapine-induced myelodysplasia of the bone narrow. Because of a complaint by a relative, the National Authority for Medico-Legal Affairs asked for an expert's opinion on whether the pharmacological treatment was adequately administered.

To our knowledge, this is the first reported case of clozapine-induced agranulocytosis to have occurred several years after the discontinuation of clozapine treatment. In this case, agranulocytosis was not caused by a reversible, acute toxic or immunological reaction in bone narrow but was a consequence of a permanent change in the maturation of blood cells, leading to myelodysplastic syndrome.

References

1. Davis JM, Chen N, Glick ID: A meta-analysis of the efficacy of second-generation antipsychotics. Arch Gen Psychiatry 2003; 60:553–564
2. Sedky K, Shaughnessy R, Hughes T, Lippmann S: Clozapine-induced agranulocytosis after 11 years of treatment (letter). Am J Psychiatry 2005; 162:814

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Review of *Interpersonal Reconstructive Therapy*

TO THE EDITOR: The book review of *Interpersonal Reconstructive Therapy: Promoting Change in Nonresponders* (1) made the point that both the structural analysis of social behavior and my therapy approach—interpersonal reconstructive therapy—have some substance but are too complex to be understandable or useful. The reviewer is not alone in reaching that conclusion. However, the same sentiment about the structural analysis of social behavior was expressed more positively by Jerry Wiggins (2), who wrote that the structural analysis of social behavior "is the most detailed, clinically rich, ambitious, and conceptually demanding of all contemporary models." Of course, reviewers are free to express any opinions they wish, but if their conclusions are to be fair and if readers are to be able to determine whether they agree or not, readers deserve an accurate representation of the material.

Please consider the following two distortions of fact in the review. The first is the following:

> Despite Benjamin's efforts to use the structural analysis of social behavior for research purposes, it has proven too complicated and cumbersome and never gained widespread application. The few research studies using Benjamin's coding system focused primarily on interactions in psychotherapy. I too have felt that the structural analysis of social behavior is an intriguing foreign language, but not terribly practical; and I never did learn the language.

There have been many publications based on the structural analysis of social behavior, and the range of topics is broad. A list of known publications is available from the University of Utah (http://www.psych.utah.edu/benjamin/sasb/index.html) by request. One published review of uses of the structural analysis of social behavior involves a series of articles that appeared in the *Journal of Consulting and Clinical Psychology* in December 1996. Another is a review of articles about the structural analysis of social behavior focused on psychotherapy by Constantino (3). In April 2006, the *Annual*