## Is There a Real Difference in Severity of Tardive Dyskinesia Between Risperidone and Olanzapine?

**To the Editor:** We read with great interest an important contribution by Chan and colleagues<sup>1</sup> of a randomized, modestly dosed comparison of risperidone and olanzapine in patients with schizophrenia/schizoaffective disorder and tardive dyskinesia (TD). They found a lower severity of TD with risperidone than olanzapine, but there are several caveats in the interpretation of their findings.

First, their use of a washout period, although short in duration, may pose a problem because it is well known that TD temporarily worsens upon discontinuation of antipsychotics (known as withdrawal dyskinesia). In fact, scores on the Abnormal Involuntary Movement Scale (AIMS) deteriorated by about 2 points in both groups as a result of termination of previous antipsychotic treatment. This would have acutely afforded more room for later improvement but could complicate interpretation of pure medication effects in the chronic condition of TD. As the authors' main concern was TD, the necessity of antipsychotic withdrawal may be questioned.

Second, the baseline AIMS score of about 18 (after antipsychotic withdrawal) in this study appears to be rather high compared with those in similar studies of TD. Therefore, the finding may be applicable only to patients with severe TD loading. In other words, generalizability of their results to more commonly encountered patients remains unknown.

Third, in addition to the fact that TD shows fluctuation in severity, 3.4 it is occasionally challenging to disentangle extrapyramidal complications 5 (in this instance, to separate TD from parkinsonism 6). In this context, their finding appears complex in that, although parkinsonism improved with olanzapine, TD improved more with risperidone. In contrast, significantly more frequent use of anticholinergics, which could be detrimental to TD, 5 was noted among risperidone-treated patients. To avoid confounding, the doses of both antipsychotics may need to have been adjusted so that use of anticholinergics would be counterbalanced between the groups. Our view is that most of the patients indeed could have been treated in the absence of anticholinergics. 7

Finally and most critically, the sole presentation of lastobservation-carried-forward data for the AIMS scores appears to be a concern in this particular case. As readers, we would like to know the results for completers only, so as to be sure that improvements in severity were consistent and not largely biased by those who prematurely dropped out (26.7% of the total sample). This would have made a real differential, if any existed, between the 2 antipsychotics more distinct. As such, completers-only data should have been presented as well.

The first 2 issues we list do not necessarily provide the basis of the authors' observation of differential improvements in TD severity for both antipsychotics under investigation. They may, however, explain a contradiction between the result found in this study and a recent negative result from a longer study, in which a more benign effect of newer versus older antipsychotics in general was not found. Our last point, though, regarding the need for a completers-only analysis, needs to be addressed, since the data would be available, in order to be certain of true differential effects. When these limitations are taken together, the authors' conclusion may be considered tentative, calling for more work on this highly pertinent topic.

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