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LETTERS TO THE EDITORS

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Comments and Reply on Ikeguchi and Kuroda: Mianserin treatment of patients with psychosis induced by antiparkinsonian drugs

Comments

The interesting study by Ikeguchi and Kuroda (1995) reporting a beneficial effect on mianserin in drug induced psychosis in Parkinson's disease (PD) is unfortunately marred by confusion between delirium and psychosis. This study is titled "Mianserin treatment of psychosis", but in fact measured delirium. The eight-item rating instrument measured items such as "wakefulness" and "sleep disturbance," which are common in non-psychotic, non-demented, non-delirious PD patients (treated and untreated), but failed to measure paranoia, undoubtedly the most important feature of L-DOPA-induced psychosis [2]. The authors failed to cite the reported benefits of ondansetron, a 5HT-3 blocker, on drug-induced psychosis in PD. Interestingly, ondansetron appears to be somewhat more effective for the visual hallucinations than the paranoia.

Finally, I wonder if the authors reviewed the UPDRS results to determine if mianserin had more of an effect on tremor than on other aspects of PD motor dysfunction. I ask this because of a report that ritanserin, another 5HT-2 blocking drug, has an anti-tremor effect in PD [4].

References

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Reply

We thank Dr. Friedman for his interest in our work and his comments.

With regard to our clinical diagnosis of psychosis in Parkinson's disease (PD) patients, as we mentioned in our paper, we consider most cases of drug-induced psychosis in PD to meet the DSM-III-R criteria for delirium. In these criteria, disorganized thinking and attention disturbance are essential for the diagnosis, but "weakfulness" and "sleep disturbance" form one of six criteria, two or more of which must be present. Also, most of the patients in the recent study of drug-induced psychosis that Dr. Friedman cited seem to meet the criteria for delirium, because all patients in that study suffered various degrees of confusion and hallucinations. Paranoid delusions were present in 56% of these patients, and this seems not to be an essential feature of drug-induced psychosis in PD.

With regard to the study of the effect of ondansetron, a 5-HT3 receptor blocker, on drug-induced psychosis in PD (Zoldan et al. 1995), we could not cite the paper (published in July 1995) because it appeared after the publication of our paper (published in February 1995). We agree that serotonergic mechanisms are pathogenetically important in the emergence of psychosis in PD patients. We

have recently reported that mianserin also ameliorated hallucinations in patients with Alzheimer's disease or ischemic vascular dementia (Ikeguchi and Kuroda 1995). Our results together with the fact that most hallucinogens are agonists of 5-HT2 receptors (Glennon et al., 1994) suggest that 5-HT2 receptors function in hallucinations occurring in various disorders such as hallucinogen abuse, PD, Alzheimer's disease and ischemic vascular dementia. Ondansetron appears to be very effective for visual hallucinations in PD. We wonder whether 5-HT3 receptors participate in the hallucinations seen in disorders other than PD. Another study of 5-HT3 receptors and hallucinations is needed.

Finally, with regard to mianserin's effect on tremor, improvements in the severity of tremor were noted in three patients in our series, but the improvements were not statistically significant.

References

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