Successful treatment of senile dyskinesia with risperidone

Risperidone is a heterocyclic neuroleptic with prominent antiserotonergic (5-HT₂) as well as anti-dopaminergic (D₂) activity. Unlike conventional neuroleptics, risperidone has a high affinity for a broad range of serotonin (5-HT) receptors, particularly for antagonizing 5-HT₂ receptors. This action results in increased dopamine levels in the striatum and is believed to contribute to a lesser incidence in extra pyramidal symptoms. We wish to report a case of a geriatric male with senile dyskinesia who responded very well to risperidone. To our knowledge, this is probably the first case report of the successful effect of risperidone on senile dyskinesia.

A 72-year-old male presented to us with history of repeated abnormal peri-oral movements of one and a half years duration. His past history revealed that he had a first episode of severe major depression about 4 years back, which was treated with lithium 900 mg/day, dothiepin 75 mg/day and 6 electro-convulsive therapy (ECTs) without any complications (including movement disorders). The patient continued this regime for 4 months and later on stopped it, as he was symptom-free. One year after the stoppage of these drugs, he started exhibiting stereotyped abnormal movements of the mouth in the form of puckering of lips, which increased in intensity during emotional situations and disappeared completely while sleeping. A neurological opinion was sought and a diagnosis of ‘senile spontaneous dyskinesia’ was made after conducting appropriate investigations. In view of normal investigation and past history of denture removal about 3 years back, a dental opinion was taken. The dentist had removed his remaining 6 teeth and a new artificial denture was fixed. Within a week his movements worsened and he had difficulty in talking and eating. These movements were almost continuous and decreased only during sleep. He was distressed due to the movements and exhibited anxiety symptoms. Further assessment revealed continuous repetitive, stereotyped puckering movements of the lips. He would control his movements but only for 1-2 minutes. He scored 7 on the Abnormal Involuntary Movements Scale (AIMS), which was moderate to severe in intensity.

Separate trials of tetrabenazine 100 mg per day, propanolol 80 mg per day, trihexyphenidyl 6 mg per day and clonazepam 6 mg per day for approximately 4-6 weeks did not show any improvement on the rating scale. In view of the possibility of the idiopathic nature of dyskinesia, risperidone 1 mg per day was started. He showed good improvement within 2 weeks of trial and at the end of 4 weeks his score went down to 1 on AIMS. He did not express anxiety or depressive symptoms but would occasionally complain of a subjective feeling of abnormal movements, which did not interfere with his routine activities. He was followed up for 4 months and there was no recurrence of dyskinetic movements of the mouth.

Most of the studies regarding the efficacy of risperidone were conducted on typical neuroleptic-induced dyskinesia and negligible data is available on the effect of risperidone on senile movement disorders. Though risperidone has shown some reduction in neuroleptic-induced dyskinesia, it does not ameliorate the dyskinesia totally. Thus risperidone does not seem to be a specific anti-dyskinetic drug like clozapine. However, our report has shown a successful outcome of spontaneous dyskinesia with risperidone therapy.

Earlier, risperidone has been used successfully in idiopathic segmental dystonia in 5 cases who were partly insensitive to haloperidol. Recent studies have also showed that risperidone is safe and effective for the treatment of tics in children or adults with the Tourette syndrome. However, the same study also emphasizes that further studies are required to evaluate the durability of the efficacy of risperidone. Repetitive orofacial movement can also occur spontaneously in edentulous elderly individuals. In our case, the reduced number of teeth must have acted as a precipitating factor and the complete removal of denture could have worsened dyskinetic movement. However, it is certain that it was not drug-induced dyskinesia.

Dyskinetic movements have been seen rarely with lithium and tricyclic and other antidepressant therapy but in our case it is most unlikely that these drugs played an important role as causative factors. Though our case report showed a positive effect of risperidone on senile dyskinesia in the elderly, it is not certain that it was not drug-induced dyskinesia.

Reports of a possible increased risk of stroke among elderly patients taking risperidone. Reuters News reported that Johnson and Johnson would soon send letters to U.S. physicians advising them of the increased risk of stroke with risperidone among elderly patients. The company also plans to change the package insert label of risperidone to note the possible stroke risk. Also, there are case reports of dyskinesia induced by risperidone in different age groups. Therefore one should be aware of such possible side-effects before giving a trial of risperidone in the elderly population.

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References


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