LETTERS TO EDITOR

TETRABNAZINE FOR ISOLATED SHOULDER TARDIVE DYSKINESIA

Sir,

Tardive dyskinesia (TD) develops during exposure to neuroleptics or within four weeks of withdrawal from a neuroleptic. The most common features of TD are the involuntary movements of the oro-buccal, lingual, facial and limb muscles while purely truncal movements are less commonly observed. Treatment of TD is often unsatisfactory especially, in refractory cases and a large pharmacopoeia has been tried in this condition ranging from vitamins to mood stabilizers. None of these treatments, however, has consistently shown benefit in controlled trials (Ondo et al., 1999). We report the successful treatment with tetrabenazine of an isolated shoulder TD, an uncommon variety of TD, in a patient with schizophrenia. This drug has recently been launched in India (in 1999) and there are no reports of its efficacy in the Indian literature.

TA, a 23-year-old, male with no contributory family history of mental or neurological illness. presented with an illness of five years duration characterized by suspiciousness, fearfulness, abusive and assaultive behaviour, feeling as if being controlled by external forces and unpredictable violence towards family members in response to command hallucinations. He was diagnosed with paranoid schizophrenia. Currently, the patient had a relapse following discontinuation of medicines. He was being treated with typical antipsychotics for the last four years and had shown improvement on medications but compliance had remained a problem. Over the last two years, while on medication, he developed an alternating rotatory movement of both the shoulders. He was having 50-60 such movements per minute, which resulted in severe subjective discomfort. The movements were involuntary, repetitive, purposeless, worsened with voluntary movements of other parts of the body and improved with relaxation and sleep. There were no associated oral or perioral movements or any other movements over the extremities. The patient

underwent a CT scan of the brain, which was normal, and other causes for this presentation were excluded by relevant laboratory investigations. A possibility of isolated shoulder TD was entertained, though initially we were tempted to regard it as a stereotypic motor phenomenon encompassing the schizophrenic psychopathology.

He was started on risperidone gradually increased up to 6 mg/day. An Abnormal Involuntary Movement Scale (AIMS) rating revealed a score of 12. The patient was then put on tetrabenazine 25 mg/day in divided doses and weekly AIMS were administered. Three weeks after commencing tetrabenazine, the AIMS rating came down to three, an improvement of 75%. Meanwhile, his psychopathology too improved and he was discharged after six weeks of in-patient stay. On follow-up after two months, the patient was completely free of TD and was continuing on risperidone 6 mg/day and tetrabenazine at 25 mg/ day. The tetrabenazine was discontinued in the next follow-up, without the re-emergence of the dyskinetic movements. The patient is currently on 4 mg of Resperidone and is symptom free, he comes for regular follow-up more than years after the first contact.

We are not aware of any incidence figures for isolated shoulder TD and a medline search using the key words 'tardive dyskinesia' and 'shoulder' was unyielding. Nevertheless, this appears to be a rare form of TD as most patients with truncal TD have associated limb TD (Brown & White, 1992). Moreover, the uncommon truncal forms may be mistaken for stereotypies typical of schizophrenia.

Besides highlighting the uncommon presentation of TD, we also call to attention the complete recovery of TD of two years duration with tetrabenazine. Tetrabenazine inhibits presynaptic dopamine release and blocks post-synaptic dopamine receptors. It has been used for decades in neurology to treat hyperkinetic movement disorder including, dystonia, chorea, tics and other dyskinesias, (Jankovic & Orman, 1988). Similarly, its use in tardive dyskinesia dates back to early

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60's (Brandup, 1961) with few reports scattered in each subsequent decade. However, there has been a resurgence of interest in this drug in recent years (Sachdev, 2000; Ondo et al., 1999; Jankovic & Beach, 1997), a probable consequence of failure of other heuristic approaches to deliver the goods.

To conclude, given the dramatic benefit shown in this case and the relatively poor efficacy of traditional treatments for TD, it is felt that tetrabenazine should be considered in all cases. of severe and refractory TD. However, a caveat is the occurrence of adverse effects such as sedation, Parkinsonism, insomnia, akathisia and depression, which may limit its use. Long-term systematic studies are encouraged to address this issue as well as to ascertain efficacy in Indian population. Moreover, Indian patients may require comparatively lower doses of tetrabenazine than their western counterparts, as indicated by our patient's response to a dose of 25 mg/day, which is considered to be the starting dose (Ondo et al., 1999). Hence, future trials with this drug are desirable.

REFERENCES:

Brandup, E. (1961) Tetrabenazine treatment in persisting dyskinesia caused by psycho-pharmacea. American Journal of Psychiatry, 118, 551-552.

Brown, K.W. & White, T. (1992) Subsyndromes of tardive dyskinesia and some clinical correlates. *Psychological Medicine*, 22, 923-927.

Jankovic, J. & Orman, J. (1988) Tetrabenazine therapy of dystonia, chorea, tics, and other dyskinesias. Neurology, 38, 391-394.

Jankovic, J. & Beach, J. (1997) Long-term effects of tetrabenazine in hyperkinetic movement disorders. Neurology, 48, 358-362.

Ondo, W.G., Hanna, P.A. & Jankovic, J. (1999) Tetrabenazine treatment of tardive dyskinesia: assessment by randomized videotape protocol. *American Journal of Psychiatry*, 156, 8,

1279-1281.

Sachdev, P.S. (2000) The current status of tardive dyskinesia. *Australian and New Zealand Journal of Psychiatry*, 34, 355-369.

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