

Relation between tardive dyskinesia and cholinesterase inhibitor.

Jesús Porta-Etessam¹, Alberto Villarejo², Lidia Gómez Vicente¹

To the editor:

Tardive dyskinesia (TD) is one of the most worrisome side effects associated to narcoleptics treatment (1, 2). Repetitive and patterned movement characterizes this condition. The most typical form of TD is oro-lingual-masticatory the movement (3). We report a patient who developed a TD after 9 month of treatment with rivastigmine (cholinesterase inhibitor). Continuous cholinergic-dopaminergic misbalance could be a factor in the pathophysiology of TD.

A 81-year-old woman presented with a 18 month history of probable Alzheimer's disease (NINCDS-ADRDA criteria). Because of memory dysfunction, she was given rivastigmine with progressive monthly increase to 3 mg twice a day. After nine months with a dose of 3 mg twice a day memory slowly increase but the patient developed repetitive and involuntary oro-lingual-masticatory movement. The patient was diagnosed of TD and rivastigmine was quickly tapered. She improved, however 3 month later the involuntary movement still persists.

TD has been related to antidopaminergic drugs, however, as other movement disorders could be the expression of a cholinergic-dopaminergic misbalance, as has been propose for the Pisa syndrome (4). Cholinesterase inhibitor could induce distonia in parkinson disease or worsen parkinsonism symptoms in some cases (5, 6), however in a long retrospective analysis there were no exacerbation of motor dysfunction (7). Theoretically cholinergic stimulation could be a factor in TD and Cholinesterase inhibitor could induce TD in Alzheimer disease.

Center:

1 Neurology Department. Hospital Clínico San Carlos. Madrid. Spain.

2 Neurology Department. Hospital "12 de octubre". Madrid. Spain

* Correspondence and reprint request to:

Dr Jesús Porta-Etessam
C/ Andrés Torrejón, 15, 7º
28014 Madrid. Spain

Phone: +34 667062490

Fax: +34 91 5527195

E-mail: jporta@yahoo.com

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