Efficacy of memantine in PDD and DLB: An extension study including washout and open-label treatment

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Objective: This 30-week extension trial was a continuation of the first double-blinded randomized controlled trial to study memantine in dementia with Lewy bodies (DLB) and Parkinson’s disease dementia (PDD). The objective was to evaluate whether deterioration upon drug withdrawal, i.e. discontinuation reactions, are associated to and thus indicate efficacy of memantine treatment. Furthermore, the aim was to explore washout dynamics in order to inform clinical practice.

Methods: Patients were enrolled from psychiatric, memory and neurological outpatient clinics in Norway, Sweden and the UK. The trial comprised a 4-week washout period and a 26-week open-label treatment period. Outcome measures were presence of discontinuation reaction upon drug withdrawal, Clinical Global Impression of Change (CGIC) and modified Unified Parkinson’s Disease Rating Scale (UPDRS).

Results: Discontinuation reactions occurred more frequently (p=0.04) in patients receiving memantine (14/24, 58%) than in patients receiving placebo (5/20, 25%). The memantine-associated benefits were lost after the 4-week washout as measured by CGIC and the scores showed a decline compared to the original baseline. The patients seemed to recover during the open-label treatment, although these findings were non-significant.

Conclusions: The findings of discontinuation reactions indicate effect of memantine treatment in this patient setting. The complete loss of memantine-associated benefits during the 4-week washout period suggests a symptomatic and not a disease-modifying effect of the drug.