## Benefit of Donepezil in Mild Alzheimer Disease

Treatment with cholinesterase inhibitors (ChEIs), particularly donepezil, may have its greatest benefits when started early in the course of Alzheimer disease (AD), according to a study by researchers from Hospital Clinic i Universitari in Barcelona; and University of Málaga; both in Spain. Their findings also indicate that the drug's beneficial effects may be greater in patients with mild rather than moderate AD.

A total of 403 patients were included in a 6-month prospective, observational, multicenter study that was conducted between April 2007 and July 2008. All participants were community-dwelling, aged over 55 years, had a recent diagnosis of possible or probable AD, had no history of previous treatment of AD with ChEIs, and did not have other significant neurologic or systemic diseases. All patients were classified as having mild or moderate AD based on their baseline Mini-Mental State Examination (MMSE) score: mild (≥ 21) or moderate (< 21). All patients were evaluated with cognitive and functional tests at baseline and 6 months later to determine the longitudinal evolution and to assess possible differences between the 2 groups.

After 6 months of donepezil monotherapy  $(9.3 \pm 1.8 \text{ mg/day})$ , the patients in both groups retained stable overall cognition with no significant change in total MMSE score. However, the sample as a whole showed a statistically significant increase in the specific domain of memory—probably due to the significant increase in the mild-AD group's mean score, the researchers say. By contrast, the mean score in the moderate-AD group decreased, resulting in a statistically significant difference between the 2 groups. The researchers also found a significant difference between the groups for the domains of Orientation and Language; the scores increased in the mild group and declined in the moderate group.

The memory alteration test scores also remained stable, though there were significant improvements in the scores of free and cued recall domains. The 2 groups also differed in score changes of temporal orientation and semantic memory: worsening in the moderate group and improving in the mild group.

Scores on the AD Functional Assessment and Change Scale decreased significantly from baseline in the sample as a whole and in each severity group; however, greater decline was seen in the instrumental activities of daily living score in the moderate group.

The researchers acknowledge that although the total MMSE score remained stable, the results in their study were not as significant as those demonstrated in an earlier Spanish study with donepezil, where the MMSE score improved significantly over baseline. However, they note, more than 60% of those patients were in mild stages, compared with 37% of the patients in their study.

Because of the short follow-up period of their study, the researchers caution, their results should be considered preliminary, and require replication with longer follow-up. Nonetheless, they urge making efforts to improve diagnosis to identify patients who should begin treatment as early as possible.

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