Therapy, Pharmacoeconomics and Pharmacovigilance

11.11 Effect of Valsartan-Amlodipine Combination on Cognitive Function in Elderly Hypertensive Patients

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Aim. Assess the effect of valsartan-amlodipine combination on cognitive function in elderly hypertensive patients.

Methods. After 2 week placebo period, a total of 120 patients aged 66-75 years with sitting DBP > 95 mmHg and < 105 mmHg and SBP > 140 mmHg were randomised to valsartan 160 mg od or to amlodipine 5 mg od or to valsartan 160mg/amlodipine 5 mg combination od for 24 weeks. In non responder patients there was a dose titration at week 4 (valsartan 240 mg, amlodipine 7.5 mg) and at week 8 (valsartan 320mg, amlodipine 10 mg). After 12 weeks the patients with an inadequate therapeutic response (DBP lowering < 10 mmHg) were discontinued; 106 patients completed the study. At the end of the placebo period and of each active treatment period, clinical BP was measured and cognitive function was evaluated through three tests evaluating the episodic memory (word list memory, word list recall, word list recognition) and one test evaluating the visuospatial abilities (trails B test).

Results. The 3 treatments significantly reduced both SBP and DBP without any significant difference among treatments. Amlodipine significantly improved only the Trails B test score (-29%, $p < 0.05$ vs placebo), while valsartan improved the word list memory score (+15.5%, $p < 0.05$ vs placebo) and the word list recall (+13.3%, $p < 0.05$ vs placebo). The valsartan/amlodipine combination improved the Trails B test score (-35.5%, $p < 0.01$ vs placebo) as well as both the word list memory score (+17.7%, $p < 0.05$ vs placebo) and the word list recall score (+15.6%, $p < 0.05$ vs placebo).

Conclusions. Our data suggest that in elderly hypertensive patients treatment with valsartan-amlodipine combination improves some components of cognitive function more than the respective monotherapy, particularly episodic memory and visuospatial abilities.