Antihypertensive Treatment in Reducing the Risk of Dementia

To the Editor:

We read with interest the article by Peila et al published in the May issue of Stroke.1 In a cohort study, including 848 men, mean age 76.7 years, the authors evaluate the efficacy of long-term treatment of hypertension in reducing the risk of cognitive dysfunction and conclude that in hypertensive men, the duration of the antihypertensive medication is associated with reduction in the risk of dementia and cognitive decline.

Several randomized, double-blind, placebo-controlled trials on the efficacy of antihypertensive treatment in prevention of dementia and cognitive impairment report controversial results. They range from no effect to a decrease in dementia incidence by 50% in a 2-year follow-up.2,3 In 2 recent meta-analyses, no convincing evidence is found that antihypertensive treatment decreases the risk of dementia and cognitive impairments, neither in patients with cardiovascular and cerebrovascular disease, nor in hypertensive subjects without apparent prior cerebrovascular disease.4,5

The controversial results from the previous trials could be attributed to the different patient populations, a wide range of blood pressure levels at entry, varied types of antihypertensive drugs used, and different neuropsychological tests applied for evaluation of the cognitive performance. Neuroimaging has not been performed and the diagnoses, particularly the cerebral small vessel disease, remain uncertain. The treatment of the associated risk factors, including lifestyle changes, is not mentioned.

Similar limitations are valid for Peila et al’s study. Furthermore, the beneficial effects explained by the long-term antihypertensive treatment may at least partly be attributable to a treatment of other concomitant vascular risk factors, especially diabetes, and an improvement in health care during the long-lasting follow-up. Therefore, this study does not contribute to answering the question whether antihypertensive treatment, even long-term, lowers the rate of dementia and cognitive decline in hypertensive subjects without a history of cerebrovascular disease. Obviously, well-designed studies or individual patient data meta-analyses should be performed to shed light on this important issue.

Disclosures

None.

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