Common risk factors for Alzheimer’s disease and Vascular dementia

According to the recent epidemiological reports, there are common risk factors in Alzheimer's disease (AD) and vascular dementia (VaD). They can be classified into 4 major categories: demographic, genetic, vascular and comorbidity risk factors. The demographic risk factor includes gender, aging, past history of severe head injury, educational carrier and occupational attainment. Male gender is a risk for VaD and stroke, whereas female gender is known as a risk factor for AD. ApoE ε4 is known to be a possible common genetic factor for both AD and cerebrovascular disease including VaD. Obesity in midlife, lack of physical activity, cigarette smoking, and excessive alcohol intake are also regarded as risk for dementia in late life. The vascular risk factors encompass hypertension in midlife, diabetes mellitus, dyslipidemia, congestive heart failure, myocardial infarction, atrial fibrillation, and chronic kidney disease. It is suggested that effective management of these vascular risk factors in midlife prevents dementia and cognitive decline in late life. Placebo-controlled randomized clinical trials of antihypertensive drugs demonstrated that intensive antihypertensive therapy reduced the risk of VaD as well as AD in late life. Low cardiac output due to hypotension and/or congestive heart failure has been regarded as a risk factor for cognitive impairment and dementia especially in elderly patients whose autoregulation of cerebral blood flow is impaired. Although further research is needed, those evidences may support a rationale for the efficacious management of vascular risk factors in the prevention of VaD as well as AD.

Biography

Ken Nagata is currently a director of Clinical Research Institute, Yokohama General Hospital, Yokohama, Japan. He was graduated from Hirosaki University School of Medicine in 1978, and had neurology training at Mihara Memorial Hospital. He received a Ph.D. degree from Hirosaki University in 1988. He was a visiting assistant professor at the Department of Neurology, University of Colorado Health Sciences Center in Denver, USA in 1983-1984. He is a founding chairman of the Japanese Vas-Cog Society, and hosted the Vas-Cog World Congress 2015 in Tokyo. His main interests include cerebrovascular disease, dementia and neuroimaging.

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