Stroke History Raises Risk of Vascular Dementia

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PORTO, PORTUGAL — Stroke was associated with a nearly 20-fold increase in risk for vascular dementia in a univariate, retrospective, case-control analysis presented at the Fourth International Congress on Vascular Dementia.

Among 205 people with vascular dementia and their control cases, those with a history of stroke were 19 times more likely to develop vascular dementia in the univariate analysis, said Dr. Casey R. Caldwell, an internal medicine physician at the Mayo Clinic, Rochester, Minn. The association of dementia with stroke was stronger in men, who had an odds ratio of 28, than in women, who had an odds ratio of 16.

For the analysis, all Mayo Clinic health records from residents of Olmsted County, Minnesota, during the period 1994-2002 were screened for any of 40 diagnoses suggestive of dementia. This screening identified 1,736 potential subjects, among whom 205 cases of vascular dementia were identified using criteria from the National Institute of Neurological Disorders and Stroke and from the Association Internationale pour la Recherché et l'Enseignement en Neurosciences (NINDS-AIREN).

The subjects were age- and gender-matched with community controls. Individuals were excluded as possible community control subjects if they had been diagnosed with dementia of any kind. Medical records were retrospectively evaluated for the pair from the date of vascular dementia diagnosis. The researchers assessed participant demographics and each subject's history of smoking, alcohol abuse, obesity, diabetes, stroke or transient ischemic attack, hypertension, coronary artery disease, heart failure, myocardial infarction, peripheral vascular disease, angina, pulmonary embolism/deep vein thrombosis, and other factors.

The researchers used univariate and multivariate conditional logistic regression to estimate the odds ratio for vascular dementia associated with exposure to specific risk factors and to explore interactions among the different risk factors.

In the univariate analysis, stroke, transient ischemic attack, diabetes, peripheral vascular disease, hypertension, and coronary artery disease were associated with an increased risk of vascular dementia.

In the multivariate analysis, stroke history, atrial fibrillation, and diabetes were associated with an increased risk of vascular dementia. Hypertension approached statistical significance in this model. ■

Late-Life AD Risk Linked to Midlife Fat Distribution

SAN DIEGO — The increased risk of Alzheimer's disease may be more closely related to midlife distribution of adiposity rather than to being overweight or obese, according to the results of a large-scale study presented at the annual meeting of the American Academy of Neurology.

Researchers were able to use data from almost 9,000 members of the Kaiser Permanente Health Plan who underwent a series of tests between 1964 and 1973 when they were aged 40-45 years. One evaluation included measurement of skinfold thickness using calipers in the subscapular and triceps regions. Between 1994 and 2003, investigators checked medical records for diagnoses of Alzheimer's disease.

The findings showed that people in the upper 20% of adiposity in the subscapular region were almost four times more likely to develop Alzheimer's disease than were those in the lowest 20%. The risk for developing Alzheimer's disease for individuals in the upper 20% of adiposity on triceps measurements was about three and a half times greater than that of people in the lowest quintile, according to lead researcher Dr. Rachel A. Whitmer, a research scientist at the Kaiser Permanente division of research, in Oakland, Calif.

Previous research by Dr. Whitmer (BMJ 2005;330:1360) and others (Arch. Intern. Med. 2003;163:1524-8) has shown that overweight and obesity in middle age increase the future risk of dementia and Alzheimer's disease. However, these studies relied on measurement of body mass index. The data from the current study, in which calipers were used to measure skinfold, were adjusted for body mass index.

—Amy Rothman Schonfeld