

DEMENTIA

Vascular comorbidities linked with early-onset dementia

Vascular comorbidities could be an important contributor to dementia in the middle-aged population, according to a Scottish cross-sectional study comprising 616,245 individuals. “Dementia in the under-65 population has been thought to be driven primarily by genetic factors”, comments Craig Heath, the lead author of the study. The results, published recently in the *Journal of Neurology, Neurosurgery & Psychiatry*, suggest that vascular comorbidities could have a more central role in the aetiology of young-onset dementia than previously thought.

“I have increasingly noted vascular comorbid conditions in those attending our regional cognitive disorders clinic,” says Heath. Given the relatively low prevalence of young-onset dementia, few previous epidemiological studies have been able to measure the risk of vascular comorbidity as a contributing factor. “The primary care informatics infrastructure in Scotland is superb,” explains Heath. Primary care practices have been encouraged to keep accurate disease registers for many conditions, including dementia and a number of vascular morbidities, which enables researchers to carry out exceptionally large population-based studies.

Using primary-care registry data, Heath *et al.* compared the prevalence of dementia in middle-aged people with vascular comorbidities and in healthy controls. Adjusted for age, sex and socioeconomic status, dementia was three times more common in individuals with a previous transient ischaemic attack or stroke, and two times more common in those with diabetes, ischaemic heart disease or peripheral vascular disease, than in those without vascular comorbidities. Chronic kidney disease and hypertension were also linked to dementia.

Heath notes that the relationship between dementia and vascular comorbidities seemed linear, with the greatest prevalence observed in those with multiple vascular comorbidities. “The findings are particularly important given the continuing rise in diabetes and a number of vascular comorbid conditions worldwide.” The results are consistent with a recently published smaller cohort study from Sweden.

Heath and co-workers plan to take advantage of Scotland’s excellent informatics infrastructure to undertake longitudinal studies. “Using routinely collected primary care data, linked to existing bioresources and well characterised clinical cohort, we are hoping to identify those at greatest risk for dementia,” says Heath.

The role of vascular factors as key contributors to dementia in the working-age population could have important consequences for public health: according to Heath, more-vigorous treatment of vascular risk factors might prevent or delay the development of subsequent cognitive decline.

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Original article Heath, C. A. *et al.* Vascular comorbidities in younger people with dementia: a cross-sectional population-based study of 616 245 middle-aged people in Scotland. *J. Neurol. Neurosurg. Psychiatry* doi:10.1136/jnnp-2014-309033