

White matter hyperintensities and vascular dementia

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Statement of the Problem:

White matter hyperintensities (WMH) are common in the elderly population, and are associated with cognitive decline and vascular dementia (VD). The pathogenesis of WMH is still unclear, but it is thought to be related to small vessel disease and chronic hypoperfusion. The aim of this study was to investigate the relationship between WMH and VD.

Method:

We conducted a cross-sectional study of 100 elderly individuals (mean age 75.5 years) who were recruited from a memory clinic. All participants underwent a comprehensive clinical and neuropsychological evaluation. WMH were assessed using a validated visual scale (0-3) on T2-weighted MRI scans. The prevalence of VD was determined based on the criteria of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR). The relationship between WMH and VD was analyzed using logistic regression models. The results showed that the prevalence of VD was significantly higher in individuals with WMH (OR = 2.1, 95% CI 1.2-3.7, p = 0.008).

Notes: