Title

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Poster Session P4: Epidemiology and Risk Factors of Vascular Dementia

P4-038 CLASSIFICATION OF VASCULAR DEMENTIA IN THE CARDIOVASCULAR HEALTH STUDY COGNITION STUDY

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Objective: To describe the diagnostic classification of incident Vascular Dementia (VaD) subjects participating in the Cardiovascular Health Study (CHS) Cognition Study. **Methods**: The CHS Cognition Study classified 480 incident cases between 1994 and 1999. The patients were diagnosed before and after reviewing the MRI of the brain. The clinicians simultaneously applied three diagnostic classifications for vascular dementia: the DSM-IV, NINDS-AIREN, and the ADDTC criteria for VaD. The ADDTC was used in combination with the National Institute of neurological and Communicative Disorders and Stroke, and the Alzheimer's Disease and Related Disorders Association (NINCDS-ADRDA) to diagnose VaD and Alzheimer's disease (AD) cases. **Results**: The pre-MRI classification showed that 52 participants had VaD, and 76 had both, AD and VaD. The DSM-IV criteria classified 61 subjects as VaD, the NINDS-AIREN criteria classified 43 subjects as Probable VaD and 10 as Possible VaD, and the ADDTC criteria classified 117 as Probable VaD and 96 as Possible. The kappa ranged from 0.21 (ADDTC vs. NINDS-AIREN) to 0.76 (DSM-IV vs. NINDS-AIREN). The combination of the ADDTC and NINCDS-ADRDA criteria showed that of the 117 subjects initially classified as Probable VaD, 26 were considered to have VaD (Probable VaD), and in 61, VaD coexisted with AD, although the VaD component was the leading cause of dementia (Probable VaD with AD). Of the 96 cases initially classified as Possible VaD, VaD coexisted with AD in 29 cases, although AD was the leading cause of dementia (Possible VaD & Probable AD), and in 67 cases, VaD and AD (Possible AD and Possible VaD) contributed equally to the dementia syndrome. **Comments**: None of the clinical criteria for VaD was able to identify the same group of subjects. The diagnosis of VaD is difficult in epidemiological studies, since post-stroke dementia can progress as AD, and significant vascular disease can be found in the MRI of subjects without clinical strokes. Whether the clinical progression is associated to AD pathology or vascular disease is difficult to establish. Therefore, the assessment of the contribution of AD to the demen-tia syndrome of vascular etiology is critical to clearly identify VaD cases.