Abstract:

OBJECTIVES: To evaluate the prevalence of silent stroke and its associated consequences on physical, cognitive, and emotional functioning in an elderly population. DESIGN: Population-based cross-sectional survey. SETTING: The Memory and Morbidity in Augsburg Elderly project in the Augsburg region of southern Germany. PARTICIPANTS: Two hundred sixty-seven community-dwelling persons aged 65 to 83. MEASUREMENTS: The presence of silent stroke was determined using magnetic resonance imaging brain scan and a single question asking for physician-diagnosed stroke in each participant. The health effect of silent stroke was assessed using rating scales for self-perceived health status (36-item short-form health survey), activities of daily living (ADLs) and instrumental ADLs, cognitive function, and depression (Center for Epidemiologic Studies Depression scale). RESULTS: Just fewer than 13% (12.7%) of participants were affected by silent stroke. Silent stroke was associated with a history of hypertension, heart surgery, and elevated C-reactive protein. Individuals with silent stroke showed impairments on the Mini-Mental State Examination test and in the cognitive domains of memory, procedural speed, and motor performance. CONCLUSION: The presence of silent
stroke has a considerable effect on cognitive performance in those affected. Determining the presence of silent stroke using brain imaging may contribute to identifying individuals at risk for developing gradual neurological deficits.