Study examines the effect of epilepsy on the aging

April 16 2008

An article published in the May 2008 issue of *Epilepsia* calls attention to the lack of knowledge regarding cognitive aging in chronic epilepsy patients. For persons with chronic epilepsy, little is known about the impact of aging on the course of cognitive and brain health, the prevalence of clinical disorders of aging (mild cognitive impairment, dementia), or the disease burdens and risk factors associated with abnormal cognitive and brain aging. The study presents data that suggest several reasons for concern.

Numerous cognitive deficits, neuroimaging abnormalities and psychiatric comorbidities have been well characterized in younger persons with chronic epilepsy, with evidence of progression of these problems in some patients by middle age.

People with chronic epilepsy have been exposed to several influences that may place them at increased risk for accelerated cognitive and brain aging, including: treatment with medications now known to adversely affect cholesterol, folate and glucose metabolism; increased rates of vascular disease risk factors; altered lifestyles that include decreased social interaction and physical inactivity; and elevated inflammatory markers.

“The cognitive status of persons who have lived with epilepsy for a long time is unclear,” says Bruce P. Hermann, lead author of the study. “Because persons with epilepsy carry other risk factors for abnormal cognitive and brain aging, there should be great concern regarding the

lack of knowledge about their cognitive and brain status in older years."

Previous research has identified numerous risk factors for abnormal cognitive aging and dementia in the general population, including vascular, inflammatory and lifestyle factors. Many of these factors are overrepresented in epilepsy, but not examined in relationship to cognitive and brain aging in epilepsy. This oversight is important given the epidemiological evidence that risk exposure and cognitive abnormalities in midlife represent critical predictors of eventual abnormal cognitive and brain aging.

"If these factors exert comparable effects in people with chronic epilepsy, the management of epilepsy must be expanded to aggressively address critical risk factors in order to protect and promote cognitive and brain health," says Hermann.

Source: Wiley