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# IN BRIEF

### **EPILEPSY**

### Risk factors identified for postictal psychosis

Postictal psychosis can be a serious complication following epileptic seizure, but the risk factors for such events are unclear. In a retrospective analysis of the clinical records of 684 patients with temporal lobe epilepsy, Hilger et al. identified 48 patients with a history of postictal psychosis, and revealed several associated risk factors including young age at epilepsy onset, presence of ictal fear, and ictal and interictal epileptiform activity. Risk of postictal psychosis was not, however, associated with MRI measures of brain pathology.

**Original article** Hilger, E. et al. Postictal psychosis in temporal lobe epilepsy: a case-control study. *Eur. J. Neurol.* doi:10.1111/ene.12125

### **ALZHEIMER DISEASE**

# Cognitive reserve in preclinical Alzheimer disease shows correlation with PET amyloid imaging

A greater level of education could delay onset of dementia in Alzheimer disease (AD), but whether such 'cognitive reserve' correlates with biomarkers of AD pathology was not known. Now, researchers have measured cerebrospinal fluid (CSF) levels of amyloid- $\beta$  (A $\beta$ ), A $\beta$  load in the brain using  $^{18}\text{F-fluorodeoxyglucose}$  PET, as well as determining education level, in 52 healthy elderly individuals. In people diagnosed with preclinical AD on the basis of CSF A $\beta$  levels, higher education was associated with lower amyloid load on PET, suggesting cognitive reserve might compensate for AD pathology in preclinical disease.

**Original article** Ewers, M. *et al.* Cognitive reserve associated with FDG-PET in preclinical Alzheimer disease. *Neurology* doi:10.1212/WNL.0b013e31828970c2

### **MIGRAINE**

### Tyrosine metabolism linked to chronic migraine

Abnormal tyrosine metabolism occurs in patients with migraine without aura—a condition that can progress to chronic migraine. A recent multicentre study involving 72 patients with chronic migraine and 37 controls has shown that serum levels of tyramine—a derivative of tyrosine—were significantly higher in patients than in controls. The researchers suggest that aberrant tyrosine metabolism could contribute to development of chronic migraine via abnormal activation of neuronal trace-amine receptors.

**Original article** D'Andreas, G. *et al.* The role of tyrosine metabolism in the pathogenesis of chronic migraine. *Cephalagia* doi:10.1177/0333102413480755

### **EPILEPSY**

## Sibling study highlights genetic trait of epilepsy

Asymptomatic siblings of patients with epilepsy have increased cortical excitability compared with healthy individuals who do not have a sibling with epilepsy, a new study has shown. The research involved 157 patients with epilepsy (generalized or focal), their unaffected siblings and 33 control individuals. The findings suggest that predisposing genetic factors are associated with epilepsy and that complex genetic–environment interactions lead to the clinical phenotype.

**Original article** Badawy, R. A. et al. Capturing the epileptic trait: cortical excitability measures in patients and their unaffected siblings. *Brain* doi:10.1093/brain/awt047