IN BRIEF

RESEARCH HIGHLIGHTS

HEADACHE

Whether chronic daily headaches (CDH) and episodic headaches of varying frequency aggregate in families has received little attention. Using a questionnairebased approach, Arruda *et al.* examined the rate of occurrence of such headaches in 1,994 children and their parents. The researchers found that the frequency of headaches in a child could be predicted by the frequency of such events in their mother, suggesting that CDH and episodic headaches aggregate in families.

Original article Arruda, M. A. *et al*. Frequency of headaches in children is influenced by headache status in the mother. *Headache* doi:10.1111/j.1526-4610.2010.01677.x

PHARMACOLOGY

The erythropoietic activity of erythropioetin (EPO) might hinder its use as a neuroprotective drug. Researchers have now developed a peptide (epotris) that has similar neuroprotective properties to EPO but does not stimulate hematopoiesis. Epotris specifically bound the EPO receptor, and promoted primary neuron survival and neurite outgrowth. In an *in vivo* model of kainic acid-induced neurotoxicity, this peptide attenuated seizures and caused reductions in mortality and neurodegeneration, but did not induce erythropoiesis. **Original article** Pankratova, S. *et al.* Neuroprotective properties of a novel, non-haematopoietic agonist of the erythropoietin receptor. *Brain* doi:10.1093/ brain/awq101

EPILEPSY

Previously, a retrospective study revealed that 12 of 14 patients with an encephalopathy alleged to have been caused by pertussis vaccination actually had undiagnosed Dravet syndrome. McIntosh and colleagues now report that in children with an *SCN1A* mutation who will go on to develop Dravet syndrome, pertussis vaccination might induce the early onset of this condition. These researchers found, however, no evidence to suggest that vaccination affects the overall clinical outcome of these patients.

Original article McIntosh, A. M. *et al.* Effects of vaccination on onset and outcome of Dravet syndrome: a retrospective study. *Lancet Neurol.* **9**, 592–598 (2010)

ALZHEIMER DISEASE

Compared with healthy people, patients with Alzheimer disease (AD) show reduced levels of amyloid- β 42 (A β_{42}) and elevated levels of total and phosphorylated tau (t-tau and p-tau) in cerebrospinal fluid (CSF). A longitudinal study in patients with AD who had similarly low levels of CSF A β_{42} showed that individuals with very high CSF t-tau and p-tau levels had a faster cognitive decline, a poorer response to cholinesterase inhibitors, and a higher mortality rate than did patients with intermediate or lower levels of these biomarkers. **Original article** Wallin, Å. K. *et al.* CSF biomarkers predict a more malignant outcome in Alzheimer disease. *Neurology* 74, 1531-1537 (2010)