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IN BRIEF

MIGRAINE

First genome-wide association study in migraine without aura identifies two susceptibility loci

The first genome-wide association study in patients with migraine without aura—the most common form of migraine—has revealed susceptibility loci for this disorder. Comparing genomes of 2,326 German and Dutch patients with those of 4,580 controls, the researchers identified single nucleotide polymorphisms associated with the disorder, which were then carried forward to replication studies in large, independent cohorts. Two susceptibilty loci were identified: one at 1q22, in the *MEF2D* gene, and one at 3p24, near the *TGFBR2* gene.

Original article Freilinger, T. *et al.* Genome-wide association analysis identifies susceptibility loci for migraine without aura. *Nat. Genet.* doi:10.1038/ng.2307

MOVEMENT DISORDERS

Novel myoclonic disorder identified in Canadian family

Russell *et al.* investigated a four-generation Canadian family presenting with adult-onset cortical myoclonus without seizures, in order to determine the phenotype of this disorder. Genetic sequencing revealed a nonsense mutation in the gene encoding nucleolar protein 3 (NLO3), which led to altered post-translational modification of the protein in all affected individuals. The authors name this novel movement disorder 'familial cortical myoclonus', and suggest that investigation into the role of NLO3 will provide insight into the pathophysiology of myoclonus and related disorders.

Original article Russell, J. F. *et al.* Familial cortical myoclonus with a mutation in NLO3. *Ann. Neurol.* doi:10.1002/ana.23666

NEURO-ONCOLOGY

Prognostic model enables accurate prediction of survival in patients with brain metastases from breast cancer

A prognostic model, combining a novel nomogram and the breast-specific graded prognostic assessment index, enables accurate prediction of survival in patients with brain metastases from breast cancer, according to recent findings. The model developed by Ahn *et al.,* which incorporates treatment effects of trastuzumab and other biological features specific to breast cancer, enabled accurate discrimination of median survivial time ($P<0.0001$) in individuals with brain metastases.

Original article Ahn, H. K. *et al.* Prediction of outcomes for patients with brain parenchymal metastases from breast cancer (BC): a new BC-specific prognostic model and a nomogram. *Neuro-Oncology* doi:10.1093/neuonc/nos137

NEURODEGENERATIVE DISEASE

Cholesterol as therapy for Pelizaeus–Merzbacher disease?

Pelizaeus–Merzbacher disease is a fatal leukodystrophy caused by duplication of the gene encoding proteolipid protein (PLP), with subsequent overexpression of the protein. Saher *et al.* previously observed co-accumulation of PLP and cholesterol in oligodendrocytes in a mouse model of the disease, prompting an investigation into the role of cholesterol in disease pathology. A cholesterol-enriched diet increased myelin content and improved motor function in the mice. Furthermore, initiation of this diet before onset of clinical symptoms slowed disease progression.

Original article Saher, G. *et al.* Therapy of Pelizaeus-Merzbacher disease in mice by feeding a cholesterol-enriched diet. *Nat. Med.* doi:10.1038/nm.2833