Nature Reviews Neurology 11, 186 (2015); published online 24 March 2015;

doi:10.1038/nrneurol.2015.44;

doi:10.1038/nrneurol.2015.45:

doi:10.1038/nrneurol.2015.46;

doi:10.1038/nrneurol.2015.47

IN BRIEF

MOTOR NEURON DISEASE

Antioxidant OXR1 protects neurons and extends survival in a mouse model of amyotrophic lateral sclerosis

Oxidation resistance 1 (OXR1) has been recently shown to protect neurons from oxidative stress, and it is upregulated in the spinal cord of patients with amyotrophic lateral sclerosis (ALS). To assess the potential neuroprotective properties of OXR1 in ALS, Liu and colleagues crossed $SOD1^{G93A}$ ALS-model mice with mice that overexpress OXR1 in neurons. The offspring had longer survival, attenuated motor deficits, and delayed pathological changes compared with typical $SOD1^{G93A}$ mice, suggesting that OXR1 is a therapeutic target for ALS.

Original article Liu, K. X. et al. Neuron-specific antioxidant OXR1 extends survival of a mouse model of amyotrophic lateral sclerosis. *Brain* doi:10.1093/brain/awv039

MIGRAINE

Migraine might be a risk factor for stroke in adolescents

In adults, migraine with aura is associated with an increased risk of ischaemic stroke, but the relationship between migraine and paediatric stroke is not completely understood. Gelfand et al. analysed data from >1.4 million children and adolescents, including 88,164 migraineurs. Overall, there was no association between migraine and the risk of stroke in the paediatric population. However, a subgroup analysis revealed that migraine in adolescents (12–17 years) was linked to an increased risk of ischaemic stroke.

Original article Gelfand, A. A. *et al.* Is migraine a risk factor for pediatric stroke? *Cephalalgia* doi:10.1177/0333102415576222

CEREBRAL ANEURYSMS

A scoring model could predict risk of aneurysm rupture

A new prediction model estimates the 3-year rupture risk for saccular cerebral aneurysms and could aid clinical decision-making. Using data from 5,651 Japanese patients, researchers built a simple scoring system that uses easily available patient and aneurysm information. The best predictors of 3-year rupture risk were older age, female sex, and hypertension. Aneurysms that had diameters >20 mm, had daughter sacs or were located in the communicating arteries were particularly likely to rupture. The prediction model has not yet been tested in non-Japanese individuals.

Original article Tominari, S. *et al.* Prediction model for three-year rupture risk of unruptured cerebral aneurysms in Japanese patients. *Ann. Neurol.* doi:10.1002/ana24400

PARKINSON DISEASE

Neuropsychiatric and cognitive profiling of patients with early, untreated Parkinson disease

According to new research, patients with early, untreated Parkinson disease (PD) are more likely to experience clinically significant depressive symptoms, anxiety and apathy than are healthy, age-matched controls. Mild cognitive impairment was relatively rare (9%) in patients with PD, and psychosis and impulse control disorders were not more common than in healthy controls. The results support the hypothesis that although some neuropsychiatric and cognitive symptoms relate to the PD pathology, others are more likely to be an adverse effect of dopamine replacement therapy.

Original article Weintraub, D. *et al.* Cognitive performance and neuropsychiatric symptoms in early, untreated Parkinson's disease. *Movement Disord.* doi:10.1002/mds.26170