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### **IN BRIEF**

#### ALZHEIMER DISEASE

# Common polymorphisms in APOE and BDNF might predict cognitive decline in individuals with amyloid- $\beta$ deposition

Accumulation of amyloid- $\beta$  (A $\beta$ ) has been associated with cognitive decline in preclinical Alzheimer disease, but the rate of decline varies widely between individuals. A new study by Yen Ying Lim and colleagues demonstrates that cognitive decline is faster in patients with A $\beta$  accumulation who carry  $APOE*\varepsilon 4$  and  $BDNF^{\text{Met}}$  alleles than in those carrying  $APOE*\varepsilon 4$  and  $BDNF^{\text{Val}}$ .  $APOE*\varepsilon 4$  was the strongest modulator of decline: over 4.5 years, little change was observed in patients with other APOE alleles. The results could facilitate estimation of prognosis, and have important implications for future clinical trials.

Original article Lim, Y. Y. et al. APOE and BDNF polymorphisms moderate amyloid- $\beta$  related cognitive decline in preclinical Alzheimer's disease. Mol. Psychiatr. doi:10.1038/mp.2014.123

#### **MIGRAINE**

#### Saccular aneurysm clipping decreases migraine prevalence

In a case–control study published recently in *Acta Neurologica Scandinavica*, 38 of 51 (74.5%) patients with saccular intracranial aneurysm (SIA) and migraine reported remission or reduced frequency of migraine attacks during the year after surgery. Tension-type headaches (THHs) were not reduced. Unruptured SIA has been previously linked to an increased prevalence of migraine, but not THH. Whether interventions such as coiling or clipping of the aneurysm could alleviate migraine in patients with SIA has been unclear.

Original article Lebedeva, E. R. et al. Remission of migraine after clipping of saccular intracranial aneurysms. Acta Neurol. Scand. doi:10.1111/ane.12292

#### **PARKINSON DISEASE**

### Serum uric acid level could be a diagnostic biomarker for PD

Low plasma uric acid level is associated with increased risk of Parkinson disease (PD), but its sensitivity as a single biomarker for PD is low. According to a new study involving 52 drug-naïve patients with newly diagnosed PD, dopamine transporter (DAT) binding correlates with serum uric acid level. Combining a uric acid assay with DAT imaging could aid diagnosis of PD, and help track disease progression.

Original article Moccia, M. et al. Uric acid relates to dopamine transporter availability in Parkinson's disease. Acta Neurol. Scand. doi:10.1111/ane.12295

#### MOTOR NEURON DISEASE

## A large case-control study finds no association between living near power lines and risk of ALS

Exposure to extremely low frequency electromagnetic fields, such as those generated by high-voltage power lines, has been speculated to increase risk of developing amyotrophic lateral sclerosis (ALS). A population-based case—control study of 1,139 patients with ALS and 2,864 frequency-matched controls found no increased risk of ALS in persons living in close vicinity of a power line relative to persons who had never lived close to power lines. The authors also conducted a meta-analysis of previous studies, which corroborated their null finding.

Original article Seelen, M. et al. Residential exposure to extremely low frequency electromagnetic fields and the risk of ALS. Neurology doi:10.1212/WNL.0000000000000052