# RESEARCH HIGHLIGHTS

# IN BRIEF

#### **DEMENTIA**

To correctly diagnose mild cognitive impairment in elderly individuals, accurate scores on neuropsychological assessments must be obtained. Findings by Lesk and colleagues suggest that recent consumption of caffeine-containing foodstuffs affects performance on neuropsychological tests in an age-dependent manner and is a factor that should be taken into account when evaluating cognitive performance in elderly patients.

**Original article** Lesk, V. E., Honey, T. E. M. & de Jager, C. A. The effect of recent consumption of caffeine-containing foodstuffs on neuropsychological tests in the elderly. *Dement. Geriatr. Cogn. Disord.* **27**, 322–328 (2009).

#### **EPILEPSY**

Differentiating between nonconvulsive status epilepticus (NCSE) and other postictal conditions in patients who exhibit a persistent altered mental state after an epileptic seizure can be difficult. In a new study, Hauf et al. show that NCSE is strongly associated with regional cortical hyperperfusion on perfusion CT. The authors propose that this imaging approach could complement EEG in the diagnosis of NCSE after a seizure.

**Original article** Hauf, M. *et al.* Cortical regional hyperperfusion in nonconvulsive status epilepticus measured by dynamic brain perfusion CT. *AJNR Am. J. Neuroradiol.* **30**, 693–698 (2009).

### PAIN

Tricyclic antidepressants (TCAs) are first-line drugs for the treatment of neuropathic pain, but their mechanisms of action in this context are unclear. In a mouse neuropathic pain model, Yalcin and colleagues have now shown that the TCA nortryptyline exerts an antiallodynic effect through stimulation of  $\beta_2$ -adrenoceptors. The use of  $\beta$ -blockers that target these receptors might be contraindicated in patients who are receiving TCAs to treat neuropathic pain.

**Original article** Yalcin, I. *et al.*  $\beta_2$ -adrenoceptors are critical for antidepressant treatment of neuropathic pain. *Ann. Neurol.* **65**, 218–225 (2009).

## **EPILEPSY**

A study conducted in Taiwan has shown that antiepileptic drug therapy has a cumulative effect on the atherosclerotic process. Atheroprotective strategies, such as vitamin supplements or antioxidant therapies, could potentially help to counteract this effect in patients who are receiving antiepileptic drug treatment on a long-term basis.

**Original article** Tan, T.-Y. *et al.* Long-term antiepileptic drug therapy contributes to the acceleration of atherosclerosis. *Epilepsia* [doi:10.1111/j.1528-1167.2009.02024.x] (2009).

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