IN BRIEF

MOTOR NEURON DISEASE

TDP-43 proteinopathy and motor neuron disease in chronic traumatic encephalopathy

McKee, A. C. *et al. J. Neuropathol. Exp. Neurol.* **69**, 918–929 (2010)

A pathological link has been identified between repeated head injury—as experienced by individuals who participate in collision sports—and motor neuron disease. When McKee *et al.* examined brain and spinal cord samples from three athletes with chronic traumatic encephalopathy, all of whom had also developed a progressive motor neuron disease, they found evidence of TAR DNA-binding protein 43 (TDP-43) proteinopathy similar to that seen in frontotemporal lobar degeneration with TDP-43 inclusions.

EPILEPSY

Neuropsychiatric symptomatology predicts seizure recurrence in newly treated patients

Petrovski, S. *et al. Neurology* **75**, 1015–1021 (2010)

Neuropsychological assessment can provide prognostic information on antiepileptic drug (AED) responsiveness in patients newly diagnosed with epilepsy, according to an Australian study. Patients who experienced seizure recurrence on AED therapy had higher pretreatment scores on the A-B Neuropsychological Assessment Scale than those whose seizures were successfully controlled, indicating that neuropsychological factors influence the response to these drugs.

PARKINSON DISEASE

Inhibitors of leucine-rich repeat kinase-2 protect against models of Parkinson's disease

Lee, B. D. *et al. Nat. Med.* **16**, 998–1000 (2010)

The leucine-rich repeat kinase-2 (*LRRK2*) gene is frequently mutated in Parkinson disease (PD), and LRRK2 represents a potential target for therapeutic intervention. In a study published in *Nature Medicine*, Lee *et al.* have shown that LRRK2 inhibitors mitigate LRRK2-induced neuronal toxicity in both *in vitro* and *in vivo* models of PD.

BRAIN IMAGING

^{18}F-flutemetamol amyloid imaging in Alzheimer disease and mild cognitive impairment: a phase 2 trial

Vandenberghe, R. *et al. Ann. Neurol.* **68**, 319–329 (2010)

Vandenberghe *et al.* report that use of the PET ligand ^{18}F-flutemetamol for amyloid-β imaging could circumvent some of the logistical problems associated with the most commonly used ligand ^{11}C-Pittsburgh compound B (^{11}C-PIB), such as the need for an on-site cyclotron. In a phase II study, the researchers showed that ^{18}F-flutemetamol and ^{11}C-PIB produced comparable results in patients with clinically probable Alzheimer disease or mild cognitive impairment.