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IN BRIEF

PARKINSON DISEASE

Impulsivity in PD alleviated by noradrenergic enhancement

A single dose of a selective noradrenaline reuptake inhibitor, atomoxetine, reduced impulsive behaviour on several neuropsychological tasks in patients with Parkinson disease (PD). Although preliminary, the results highlight a new strategy for treating those aspects of executive dysfunction associated with PD that are not amenable to dopaminergic manipulation. Degeneration of the locus coeruleus—which compromises noradrenergic neurotransmission—is known to occur in PD, but augmentation of noradrenaline has remained virtually unexplored in patients with PD.

Original article Kehagia, A. A. *et al.* Targeting impulsivity in Parkinson's disease using atomoxetine. *Brain* doi:10.1093/brain/awu117

TRAUMATIC BRAIN INJURY

Benefits of resuming anticoagulant therapy after traumatic brain injury outweigh the risks

Patients who have received warfarin before traumatic brain injury (TBI) could benefit from resumption of anticoagulation after discharge. A retrospective analysis of health insurance claims data from >10,000 older adults demonstrates that although warfarin use after TBI was associated with increased risk of haemorrhagic events, most patients benefit from anticoagulation therapy because of the substantial decrease in risk of stroke and thrombotic events.

Original article Albrecht, J. S. *et al.* Benefits and risks of anticoagulation resumption following traumatic brain injury. *JAMA Intern. Med.* doi:10.1001/jamainternmed.2014.2534

ALZHEIMER DISEASE

Infection burden could contribute to AD

Multiple infections might increase glial activation and susceptibility to Alzheimer disease (AD), a recent study suggests. Xian-Le Bu and colleagues studied the infectious burden—a composite serological measure of exposure to common pathogens—in 128 patients with AD and 135 healthy controls. The authors found that having serum antibodies to multiple pathogens was associated with poor cognitive function, and with increased levels of serum amyloid- β protein and inflammatory cytokines. The findings support the role of neuroinflammation in the aetiopathogenesis of AD.

Original article Bu, X.-L. *et al.* A study on the association between infectious burden and Alzheimer's disease. *Eur. J. Neurol.* doi:10.1111/ene.12477

NEUROMUSCULAR DISEASE

Caspase-4 is a potential therapeutic target for Duchenne muscular dystrophy

Dystrophin deficiency leads to heightened endoplasmic reticulum (ER) stress in Duchenne muscular dystrophy (DMD). ER stress activates the caspase pathway, thereby triggering muscle cell apoptosis. Ablating caspase-12 protein caused resistance to ER stress and preserved muscle function in a mouse model of DMD. Caspase-4—the homologous human protein—could, thus, represent a therapeutic target for DMD. Drugs that reduce ER stress and caspase-4 activity are already in use for hepatological disorders, meaning that clinical trials could be possible in near future.

Original article Moorwood, C. & Barton, E. R. Caspase-12 ablation preserves muscle function in the *mdx* mouse. *Hum. Mol. Gen.* doi:10.1093/hmg/ddu249