

IN BRIEF

STROKE

Vascular adhesion protein 1/semicarbazide-sensitive amine oxidase (VAP-1/SSAO) activity is significantly greater in patients with stroke who experience hemorrhagic transformation following tissue plasminogen activator treatment (tPA) than in those who do not experience adverse events with tPA therapy. According to Hernandez-Guillamon *et al.*, increased VAP-1/SSAO activity is associated with poor neurological outcome, and blocking the activity of this enzyme in an animal model of stroke prevents adverse events related to tPA treatment.

Original article Hernandez-Guillamon, M. *et al.* Plasma VAP-1/SSAO activity predicts intracranial hemorrhages and adverse neurological outcome after tissue plasminogen activator treatment in stroke. *Stroke* doi:10.1161/STROKEAHA.110.584623

SLEEP

Patients with idiopathic rapid eye movement (REM) sleep behavior disorder (iRBD) have an increased risk of developing Parkinson disease (PD). Unger and colleagues have demonstrated that diffusion tensor imaging can detect changes in brain microstructure in patients with iRBD. These changes were identified in brain regions associated with REM sleep regulation, some of which exhibit neurodegeneration in iRBD and/or PD. This technique might, therefore, identify individuals at risk of developing PD.

Original article Unger, M. M. *et al.* Diffusion tensor imaging in idiopathic REM sleep behavior disorder reveals microstructural changes in the brainstem, substantia nigra, olfactory region, and other brain regions. *Sleep* 33, 767–773 (2010)

NEURODEGENERATIVE DISEASE

Neuronal degeneration in the caudate nucleus and putamen is an early feature of Huntington disease (HD), and these two brain areas are both required for motor sequence learning. Schneider *et al.* have shown that explicit (intentional) but not implicit (incidental) motor sequence learning is impaired in patients with HD compared with controls. Explicit motor sequence learning dysfunction might, therefore, be a useful biomarker for this disease.

Original article Schneider, S. A. *et al.* Abnormal explicit but normal implicit sequence learning in premanifest and early Huntington's disease. *Mov. Disord.* doi:10.1002/mds.22692

EPILEPSY

In a new study, Goldstein *et al.* have demonstrated that in patients with psychogenic nonepileptic seizures cognitive-behavioral therapy (CBT) combined with standard medical care (SMC) substantially reduces seizure frequency compared with SMC alone. Patients receiving CBT were also more likely to have experienced 3 months of seizure freedom at 6 month follow-up.

Original article Goldstein, L. H. *et al.* Cognitive-behavioral therapy for psychogenic nonepileptic seizures. *Neurology* 74, 1986–1994 (2010)