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IN BRIEF

PARKINSON DISEASE

White matter hyperintensities in cholinergic pathways correlate with cognitive status in Parkinson disease

Cognitive performance in patients with Alzheimer disease is known to correlate negatively with white matter hyperintensity (WMH) burden in cholinergic pathways, and a similar phenomenon has now been shown in Parkinson disease (PD). Scores on the Cholinergic Pathways Hyperintensities Scale were found to be significantly higher in cases of PD with dementia than in PD patients with intact cognition or mild cognitive impairment, confirming a link between cholinergic WMHs and cognitive dysfunction.

Original article Shin, J. *et al.* Subcortical white matter hyperintensities within the cholinergic pathways of Parkinson's disease patients according to cognitive status. *J. Neurol. Neurosurg. Psychiatry* doi:10.1136/jnnp-2011-300872

CEREBROVASCULAR DISEASE

Postpartum cerebral vasoconstriction can be fatal

A case series published in *Archives of Neurology* highlights the potentially grave consequences of postpartum cerebral vasoconstriction syndrome. Fugate *et al.* describe the cases of four women, all of whom died after rapidly developing symptoms of cerebral vasoconstriction—which often include severe ‘thunderclap’ headaches—in the postpartum period. The authors advocate close monitoring and cerebrovascular imaging in women who present with acute neurological symptoms shortly after giving birth.

Original article Fugate, J. E. *et al.* Fulminant postpartum cerebral vasoconstriction syndrome. *Arch. Neurol.* **69**, 111–117 (2012)

NEUROMUSCULAR DISEASE

Rituximab treatment has long-term effects in MuSK myasthenia gravis

A small study reported in *Neurology* indicates that patients who have myasthenia gravis with antibodies to MuSK (MuSK-MG) experience long-term benefits from treatment with the monoclonal antibody rituximab. Over a 31-month period after rituximab infusion, all six patients with MuSK-MG in the study entered remission or showed minimal disease manifestations, and none required reinfusion of the drug. By contrast, reinfusion was necessary in six of 11 patients who had MG with anti-AChR antibodies.

Original article Díaz-Manera, J. *et al.* Long-lasting treatment effect of rituximab in MuSK myasthenia. *Neurology* **78**, 189–193 (2012)

STROKE

Low-frequency rTMS could be beneficial in chronic stroke

The results of a randomized, sham-controlled trial suggest that low-frequency repetitive transcranial magnetic stimulation (rTMS) boosts use-dependent motor plasticity and enhances the efficacy of physical therapy interventions in patient with chronic stroke. Administration of low-frequency rTMS before physical therapy seemed to be the optimal approach, although patients who received rTMS after physical therapy also exhibited some behavioral and neurophysiological improvements over those receiving physical therapy plus sham rTMS.

Original article Avenanti, A. *et al.* Low-frequency rTMS promotes use-dependent motor plasticity in chronic stroke: a randomized trial. *Neurology* **78**, 256–264 (2012)