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## IN BRIEF

### SPINAL CORD INJURY

#### Acute hyperglycaemia exacerbates spinal cord injury in mice, and predicts poor recovery in human patients

A new study in mice has found that hyperglycaemia after spinal cord injury (SCI) worsens inflammation via effects on nuclear factor  $\kappa$ B and leads to more-severe motor deficits. This effect could be prevented by restoration of normal blood glucose level with an insulin injection. The investigators also reviewed data from 528 patients with SCI, and found that acute hyperglycaemia was a significant risk factor for poor functional recovery. These results highlight the importance of glycaemic control after SCI.

**Original article** Kobayakawa, K. *et al.* Acute hyperglycemia impairs functional improvement after spinal cord injury in mice and humans. *Sci. Transl. Med.* **6**, 256ra137

### PERIPHERAL NEUROPATHIES

#### New recommendations for use of temperature threshold testing in the diagnosis of small-fibre neuropathy

A team from Maastricht University Medical Centre, Netherlands, analysed the results of temperature threshold testing in 81 patients with small-fibre neuropathies and 81 controls, and identified the most time-efficient protocol for diagnosis. Leaving out heat pain threshold testing and limiting the assessment to patients' abilities to detect changes in warm and cool stimuli in both hands and feet yielded diagnostic sensitivity of 84% and specificity of 93%, and shortened examinations from 90 min to 40 min.

**Original article** Bakkens, M. *et al.* Optimizing temperature threshold testing in small fiber neuropathy. *Muscle Nerve* doi:10.1002/mus.24473

### MULTIPLE SCLEROSIS

#### Survey uncovers the needs of people with severe MS

Researchers in Italy have interviewed patients with severe disability due to progressive multiple sclerosis (MS) about what they felt were their unmet needs. Patients highlighted difficulties maintaining personal hygiene as a major concern, and many described psychosocial stress including feeling burdensome to their families and carers, or feeling lonely. Coping with disability arose as a more pressing issue for patients with severe MS than did end-of-life care.

**Original article** Borreani, C. *et al.* Unmet needs of people with severe multiple sclerosis and their carers: qualitative findings for a home-based intervention. *PLoS ONE* **9**, e109679

### STROKE

#### Transcranial laser therapy for stroke fails futility analysis

A phase III trial of transcranial laser therapy has been discontinued after an interim analysis found no effect of laser therapy on patients' disability after ischaemic stroke. The transcranial laser device used in the trial was purported to provide energy to hypoxic mitochondria via near-infrared radiation, thereby limiting apoptosis. As soon as the results of the futility analysis were made available, venture capital groups liquidated the device manufacturer, which seriously hindered the responsible termination of the trial and the reporting of results.

**Original article** Hacke, W. *et al.* Transcranial laser therapy in acute stroke treatment: results of Neurothera Effectiveness and Safety Trial 3, a phase III clinical end point device trial. *Stroke* doi:10.1161/STROKEAHA.114.005795