

## IN BRIEF

**NEURAL REPAIR****The astrocytic scar facilitates axon regeneration in the CNS, contrary to accepted wisdom**

Astrocytic scar formation is generally considered to be a major barrier to axon regeneration in the injured CNS; however, a new report published in *Nature* presents several lines of evidence that the scar actually promotes axon growth. In a mouse model of spinal cord injury, prevention of astrocytic scar formation or ablation of an existing scar led to attenuation of axon regrowth across the lesion. In addition, scar-forming astrocytes were shown to express the chondroitin sulfate proteoglycans CSPG3 and CSPG4, which support axon growth.

**ORIGINAL ARTICLE** Anderson, M. A. *et al.* Astrocyte scar formation aids central nervous system axon regeneration. *Nature* **532**, 195–200 (2016)

**MIGRAINE****Migraine is associated with restless legs and sleepless nights**

Individuals with migraine have an almost twofold increased risk of restless legs syndrome (RLS) and are especially susceptible to severe RLS, according to a study published in the *European Journal of Neurology*. The prevalence of RLS was 16.9% in patients with migraine, compared with 8.7% in non-headache controls, and the mean RLS severity score was significantly higher in the migraine cohort than in the controls. In addition, migraine patients with RLS frequently reported insomnia and poor sleep quality, which could trigger further migraine attacks.

**ORIGINAL ARTICLE** van Oosterhout, W. P. *et al.* Restless legs syndrome in migraine patients: prevalence and severity. *Eur. J. Neurol.* <http://dx.doi.org/10.1111/ene.12993> (2016)

**MULTIPLE SCLEROSIS****Could *Helicobacter pylori* provide protection against multiple sclerosis?**

A recent systematic review and meta-analysis has identified an inverse relationship between *Helicobacter pylori* infection — a common cause of stomach ulcers — and multiple sclerosis (MS). On the basis of data from six observational studies involving 1,902 individuals, the prevalence of *H. pylori* infection was significantly lower in patients with MS than in controls (pooled OR 0.59). The results suggest that *H. pylori* affords some protection against the development of MS.

**ORIGINAL ARTICLE** Jaruvongvanich, V. *et al.* Association between *Helicobacter pylori* infection and multiple sclerosis: a systematic review and meta-analysis. *Mult. Scler. Relat. Disord.* **7**, 92–97 (2016)

**STROKE****Stereotactic radiosurgery reduces stroke risk in patients with small unruptured brain AVMs**

Brain arteriovenous malformations (AVMs) carry an elevated risk of stroke, but therapeutic intervention in individuals with unruptured AVMs can sometimes do more harm than good. A new retrospective study reported in *Stroke* has demonstrated the benefits of stereotactic radiosurgery (SRS) — one of the least invasive AVM interventions — in patients with small unruptured AVMs: a 53% reduction in the risk of cerebral haemorrhage was observed after SRS. The authors conclude that SRS is a viable therapeutic option for patients with small unruptured AVMs, although they acknowledge that further studies with longer follow-up are required to confirm the advantages of this approach.

**ORIGINAL ARTICLE** Hanakita, S. *et al.* Risk reduction of cerebral stroke after stereotactic radiosurgery for small unruptured brain arteriovenous malformations. *Stroke* <http://dx.doi.org/10.1161/STROKEAHA.116.013132> (2016)