RESEARCH HIGHLIGHTS

IN BRIEF

MULTIPLE SCLEROSIS

Tobacco smoking is known to increase the risk of developing multiple sclerosis (MS), but its effects on MS progression are less clear. Healy et al. performed a longitudinal follow-up study on 1,465 patients with clinically definite MS, 257 of whom were current smokers. The study showed that the disease progressed more rapidly from a relapsing–remitting course to a secondary progressive course in the smokers than in patients who had never smoked.

Original article Healy, B. C. et al. Smoking and disease progression in multiple sclerosis. *Arch. Neurol.* 66, 817–818 (2009).

EPILEPSY

Fattal-Valevski et al. have examined the long-term neurological consequences of thiamine deficiency in seven children in Israel, all of whom had been fed with a defective soy-based formula during infancy. As well as exhibiting mental retardation and motor disabilities, the children all developed myoclonic or complex partial seizures. These findings indicate that epilepsy can result from severe infantile thiamine deficiency.

Original article Fattal-Valevski, A. et al. Epilepsy in children with infantile thiamine deficiency. *Neurology* doi:10.1212/WNL.0b13e3181b121f5

SPINAL CORD INJURY

Peng et al. have shown that Brilliant blue G (BBG), a compound derived from a commonly used blue food coloring, has neuroprotective effects when administered to rats after spinal cord injury. BBG antagonizes P2X7 receptors, which become activated as a result of ATP release from damaged tissue. The investigators propose that administration of BBG could represent a viable approach to the treatment of spinal cord injury in humans.

Original article Peng, W. et al. Systemic administration of an antagonist of the ATP-sensitive receptor P2X7 improves recovery after spinal cord injury. *Proc. Natl Acad. Sci. USA* **106**, 12489–12493 (2009).

MIGRAINE

Migraine auras are proposed to be caused by cortical spreading depression, and a new study lends support to this idea. In a randomized, double-blind, placebo-controlled crossover study, Hauge et al. showed that tonabersat, a drug that inhibits cortical spreading depression, had a preventative effect against aura attacks with or without headache, but not against migraine attacks without aura.

Original article Hauge, A. W. et al. Effects of tonabersat on migraine with aura: a randomized, double-blind, placebo-controlled crossover study. *Lancet Neurol.* **8**, 718–723 (2009).

NATURE REVIEWS | NEUROLOGY VOLUME 5 | SEPTEMBER 2009 | 464