

IN BRIEF

PARKINSON DISEASE

A study published in *Neurology* provides new insights into the relationship between smoking and Parkinson disease (PD). The risk of developing PD was already known to be lower among smokers than in the general population, and this large epidemiological survey shows that smoking duration is more important than smoking intensity in determining PD risk. Given the adverse effects of smoking in other health domains, the clinical implications and potential applications of this knowledge remain to be determined.

Original article Chen, H. *et al.* Smoking duration, intensity, and risk of Parkinson disease. *Neurology* 74, 878–884 (2010)

MULTIPLE SCLEROSIS

Progressive thinning of the retinal nerve fiber layer (RNFL) correlates significantly with visual loss in patients with multiple sclerosis (MS) even in the absence of a history of optic neuritis, according to a longitudinal study by Laura Balcer and colleagues. The authors suggest that measurement of RNFL thickness by optical coherence tomography, in combination with low-contrast visual acuity scores, could be used to monitor the effectiveness of potential neuroprotective strategies in MS clinical trials.

Original article Talman, L. S. *et al.* Longitudinal study of vision and retinal nerve fiber layer thickness in MS. *Ann. Neurol.* doi:10.1002/ana.22005

MIGRAINE

Acetaminophen is commonly used to treat migraine attacks, yet clinical trial data on its efficacy are surprisingly scarce. Prior *et al.* conducted a randomized, placebo-controlled, double-blind trial involving 346 patients, 177 of whom received a single 1,000 mg dose of acetaminophen and 169 of whom received placebo. The drug was found not only to alleviate migraine pain but also to relieve associated symptoms such as nausea and photophobia.

Original article Prior, M. J. *et al.* A randomized, placebo-controlled trial of acetaminophen for treatment of migraine headache. *Headache* doi:10.1111/j.1526-4610.2010.01638.x

STROKE

Research by Zhang *et al.* indicates that the selective proteasome inhibitor VELCADE® (Millennium Pharmaceuticals, Inc., Cambridge, MA) exerts neuroprotective effects and enhances the thrombolytic efficacy of tissue plasminogen activator (tPA) in aged rats after stroke. Thrombolytic therapy in elderly individuals can be hindered by age-related phenomena such as increased levels of prothrombotic factors and reduced fibrinolytic activity, and the use of VELCADE® in combination with tPA could represent a promising approach to overcoming some of these difficulties.

Original article Zhang, L. *et al.* Combination treatment with VELCADE and low-dose tissue plasminogen activator provides potent neuroprotection in aged rats after embolic focal ischemia. *Stroke* doi:10.1161/STROKEAHA.109.577288