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IN BRIEF

STROKE

New study vindicates use of low-dose alteplase in East Asia

Alteplase at 0.6 mg/kg body weight produces comparable outcomes to the standard 0.9 mg/kg dose in Korean patients with ischaemic stroke, a recent study reveals. Use of low-dose alteplase is common in East Asia, owing to concerns over the risk of cerebral haemorrhage, but few studies have compared it with the standard dose. Over a 6-year period in the Republic of Korea, the low dose was given to ~30% of 1,526 patients with ischaemic stroke. No differences were seen between the doses in the rates of haemorrhagic conversion or in modified Rankin Scale scores at 3 months. The low dose was also associated with reduced mortality.

Original article Kim, B. J. *et al.* Low- versus standard-dose alteplase for ischemic strokes within 4.5 hours: a comparative effectiveness and safety study. *Stroke* doi:10.1161/STROKEAHA.115.010180

EPILEPSY

Algorithm can determine the side of a seizure focus via PET

Temporal lobe epilepsy can be efficiently localized to the left or right hemispheres via analysis of ¹⁸F-FDG–PET data, according to a new report. Pustina and colleagues used stepwise linear regression to analyse PET, MRI and diffusion tensor imaging data from patients with epilepsy. PET scans were best for homing in on the seizure focus, and multimodal imaging did not yield further insight. When investigators applied a predictive model to new patients, the side of the seizure focus was identified with high accuracy.

Original article Pustina, D. *et al.* Predicting the laterality of temporal lobe epilepsy from PET, MRI, and DTI: a multimodal study predicting temporal lobe epilepsy laterality. *Neuroimage Clin.* doi:10.1016/j.nicl.2015.07.010

PARKINSON DISEASE

GAPDH mutations can increase or decrease the risk of PD

Two single-nucleotide polymorphisms in the *GAPDH* gene have been associated with the risk of Parkinson disease (PD) in China. Liu and co-workers recruited 302 patients with PD and 377 healthy controls, and performed a targeted screen for two polymorphisms that had previously been associated with late-onset Alzheimer disease. Carriers of the rs3741918 allele had a lower risk of sporadic PD than did noncarriers (OR 0.74), whereas the rs1060619 variant was associated with an increased risk (OR 1.41).

Original article Liu, L. *et al.* Genetic variants in *GAPDH* confer susceptibility to sporadic Parkinson's disease in a Chinese Han population. *PLoS ONE* **10**, e0135425 (2015)

BRAIN IMAGING

Network analysis facilitates lesion–symptom mapping

A new study elucidates how heterogeneously located brain lesions can consistently lead to syndromes such as central poststroke pain. Investigators used structural MRI data from published and unpublished case reports of patients with hallucination disorders, central poststroke pain or aphasia, and mapped lesions onto a standard atlas. These maps were compared with open resting-state connectivity data, revealing how the lesions affected networks associated with patients' symptoms. This methodology might help to predict outcomes and prioritize care for patients after stroke or brain injury.

Original article Boes, A. D. *et al.* Network localization of neurological symptoms from focal brain lesions. *Brain* doi:10.1093/brain/aww228