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IN BRIEF

STROKE

Distinct blood RNA profiles in transient ischemic attack

An RNA microarray study has demonstrated specific gene expression patterns in the blood of patients who have recently experienced a transient ischemic attack (TIA). 449 genes were found to be differentially expressed between healthy controls and patients with TIA, and the expression profiles were consistent with proinflammatory and procoagulant activity in TIA. The researchers identified a panel of 34 genes that could distinguish patients with TIA from controls with 100% sensitivity and specificity.

Original article Zhan, X. *et al.* Transient ischemic attacks characterized by RNA profiles in blood. *Neurology* 77, 1718–1724 (2011)

MOTOR NEURON DISEASE

Serum *N*-acetylaspartate: a potential biomarker for amyotrophic lateral sclerosis?

Previous studies using magnetic resonance spectroscopy have shown that *N*-acetylaspartate (NAA) levels are reduced in the brains of patients with amyotrophic lateral sclerosis (ALS). New research indicates that this change is accompanied by an increase in serum levels of NAA, perhaps owing to release of this molecule from damaged neurons into the circulation. Serum NAA levels correlated significantly with ALS progression rates, suggesting a possible application as a biomarker for this condition.

Original article Simone, I. L. *et al.* Serum *N*-acetylaspartate level in amyotrophic lateral sclerosis. *Arch. Neurol.* 68, 1308–1312 (2011)

MOVEMENT DISORDERS

Vascular endothelial growth factor alleviates spinocerebellar ataxia type 1 in mice

Spinocerebellar ataxia type 1 (SCA1) is caused by a CAG repeat expansion in the ataxin-1 (*ATXN1*) gene. Experiments in a mouse model of SCA1 have now shown that the mutant *ATXN1* protein represses transcription of the gene that encodes vascular endothelial growth factor (VEGF), and that overexpression or infusion of VEGF improves motor function in these animals. The authors propose that VEGF could represent a novel therapeutic strategy for SCA1.

Original article Cvetanovic, M. *et al.* Vascular endothelial growth factor ameliorates the ataxic phenotype in a mouse model of spinocerebellar ataxia type 1. *Nat. Med.* 17, 1445–1447 (2011)

STROKE

Serum ferritin predicts hemorrhagic transformation in acute ischemic stroke

A Korean study involving 752 patients with acute ischemic stroke has found a significant association between high serum ferritin levels and hemorrhagic transformation, a serious complication that can counteract the benefits of reperfusion therapies. The investigators advocate a cautious management strategy in stroke patients with elevated serum ferritin levels. In addition, iron-modifying agents or free radical scavengers might be employed to reduce ferritin levels in these individuals.

Original article Choi, K.-H. *et al.* The serum ferritin level is an important predictor of hemorrhagic transformation in acute ischaemic stroke. *Eur. J. Neurol.* doi:10.1111/j.1468-1331.2011.03564.x