In This Issue

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Research

CLINICAL TRIAL
High-Dosage CoQ10 in Early PD  543
In a phase III randomized, placebo-controlled, double-blind clinical trial of participants who received a diagnosis of PD within 5 years and had no anticipated need for dopaminergic therapy within 3 months, The Parkinson Study Group QE3 Investigators examine whether coenzyme Q10 (CoQ10) could slow disease progression in early Parkinson disease (PD). Coenzyme Q10 was safe and well tolerated in this population, but showed no evidence of clinical benefit. Schapira and Patel contribute an accompanying editorial.

Editorial  537

FDG-PET in ALS  553
Van Laere and colleagues evaluate the use of 18fluorodeoxyglucose–positron-emission tomography (FDG-PET) as a marker of amyotrophic lateral sclerosis (ALS) pathology and investigate whether a specific metabolic signature is present in patients with C9orf72 mutations. Positron-emission tomographic data are spatially normalized and analyzed using a predefined volume of interest and a voxel-based analysis (SPM8). Compared with control participants, FDG-PET showed perirolandic and variable prefrontal hypometabolism in most patients. Foerster and Feldman have provided editorial perspective.

Editorial  539

Arterial Stiffness and Aβ Progression  562
Hughes and coauthors examine the association between measures of arterial stiffness and change in Aβ deposition over time. Deposition of Aβ was determined in a longitudinal observational study of aging by positron emission tomography using the Pittsburgh compound B twice 2 years apart in 81 nondemented individuals 83 years and older. This study shows that Aβ deposition increases with age in nondemented individuals and that arterial stiffness is strongly associated with the progressive deposition of Aβ in the brain, especially in this age group. King reviews the importance of these findings in an accompanying editorial.

Editorial  541

Autoimmune Etiology of Epilepsy  569
Ong and colleagues conducted a population-level study investigating the relationship between epilepsy and several common autoimmune diseases. They examined the relationship between epilepsy and 12 autoimmune diseases. The risk of epilepsy was significantly heightened among patients with autoimmune diseases and was especially pronounced in children, with an elevated risk that was consistently observed across all 12 autoimmune diseases.

Clinical Review & Education

Neuroprotective Strategies for Ischemic Stroke  634
Neuhaus and coauthors review some recent developments in preclinical stroke, providing examples of how improved study quality and the use of novel methods can facilitate translation into the clinical setting. This is a narrative review of ischemic stroke neuroprotection based on electronic database searches, references of previous publications, and personal libraries. The improvements in preclinical stroke models and methods will make stroke research a good example for preclinical medicine, in general, and will hopefully instill greater confidence in the clinical community regarding which compounds are worthy of further investigation in a clinical setting.