In a retrospective cohort study, Rangaraju and coauthors assess whether patients with intracranial large-vessel occlusions who received intra-arterial therapy have smaller final infarct volumes than patients who received either intravenous tissue plasminogen activator therapy or no reperfusion therapy. Editorial perspective is provided by Adams and Froehler.

Results of Intravenous Thrombolysis

In an observational study based on Safe Implementation of Treatment in Stroke International Stroke Thrombolysis Register (SITS-ISTR) data during the period from 2002 to 2011, Ahmed and coauthors compare outcomes of patients who were treated within 4.5 to 6 hours or within 3 to 4.5 hours of the onset of an ischemic stroke with outcomes of patients who were treated within 3 hours in the SITS-ISTR.

Functional MRI in Traumatic Brain Injury

Palacios et al studied functional magnetic resonance imaging (MRI) abnormalities in signal amplitude and brain connectivity at rest and their relationship to cognitive outcome in patients with chronic and severe traumatic axonal injury.

Patients Having PD With vs Without GBA Mutations

To determine if patients having Parkinson disease (PD) with vs without GBA mutations differ in clinical phenotype or plasma protein expression, Chahine et al performed a case-control study. Clinical characteristics were compared between groups, and biochemical profiling of 40 plasma proteins was performed to identify proteins that differed in expression between groups.

Synucleinopathies and Tauopathies in Parkinsonism

Savica et al investigate the incidence and distribution of specific types of parkinsonism and related proteinopathies in the general population.

Cognitive Impairment in Families With Longevity

Cosentino et al determine whether families with exceptional longevity are protected against cognitive impairment consistent with Alzheimer disease.

Genetic Analysis of Inherited Leukodystrophies

Guerreiro et al sequenced a large cohort of adult-onset leukodystrophy cases to better understand the genetic role of mutations in CSF1R.

Brain Effects of Growth Hormone–Releasing Hormone

Friedman et al used brain magnetic resonance spectroscopy to examine the neurochemical effects of growth hormone–releasing hormone in adults with mild cognitive impairment and in healthy older adults.
REML in Narcolepsy/Hypocretin Deficiency 891
Andlauer et al determine the diagnostic accuracy and clinical utility of nocturnal rapid eye movement sleep latency (REML) measures in narcolepsy/hypocretin deficiency.

Aβ Deposition, Cortical Thickness, and Memory 903
Doré et al investigated the topographical relationship of Aβ deposition, gray matter atrophy, and memory impairment in asymptomatic individuals with Alzheimer disease pathology as assessed by Pittsburgh compound B positron emission tomography.

Clinical Review & Education

Diagnosis of Pompe Disease 923
Vising and colleagues evaluate the use of muscle biopsy vs blood-based enzymatic assays in the diagnosis of late-onset Pompe disease.

TRIM Proteins in Muscular Dystrophy 928
Alloush and Weisleder review the literature on membrane repair in the past decade, considering recent discoveries of genes associated with the membrane repair process in skeletal muscle and the implications for treatment of muscular dystrophy.

Blind and Confused 932
In this clinical pathological conference, Sharma and colleagues discuss a complex and challenging case of a 62-year-old man with confusion and loss of vision.

Images in Neurology

Cortical Vein Air Emboli With Gyriform Infarcts 937
Fulminant Idiopathic Intracranial Hypertension 939

Latest Quiz

A 55-year-old woman presented with a 2-week history of low-grade fever and holocephalic headache followed by a 2-week history of increasing dizziness, imbalance, falls, and gradual subtle mental confusion. What is your diagnosis?