**Results of the Management of Atherothrombosis With Clopidogrel in High-Risk Patients Trial**

Fisher (page 20) reviews the MATCH trial whereby clopidogrel and aspirin was compared with clopidogrel alone for secondary prevention in patients who have had a transient ischemic attack or stroke in a high-risk population with a high prevalence of other vascular risk factors. A nonsignificant trend for a reduction of the combined end point of ischemic stroke, myocardial infarction, vascular death, and rehospitalization was observed in the combination therapy group. The frequency of serious, life-threatening bleeding adverse effects was almost doubled in the combination arm. Neurologists need to be aware of these results and avoid the use of clopidogrel with aspirin in patients who have had a transient ischemic attack or stroke until evidence is provided that the combination is safe in this population.

**Molecular Pathogenesis of Multiple Sclerosis**

Imitola and colleagues (page 25) discuss emerging molecular evidence for multiple sclerosis progression with particular focus on alterations in the local central nervous system microenvironment of neural and glial cells.

**Neuropathologic Substrate of Mild Cognitive Impairment**

Markesbery et al (page 38) report that in a longitudinal study of patients with amnestic mild cognitive impairment, the early neuropathologic changes of Alzheimer disease were already present. From a neuropathologic perspective, it appears that amnestic mild cognitive impairment is in reality early Alzheimer disease. Editorial perspective is provided by John C. Morris, MD.

**Memantine in Alzheimer Disease**

Reisberg and colleagues (page 49) evaluated long-term memantine treatment in moderate to severe Alzheimer disease. Patients who switched to memantine therapy from their previous placebo therapy experienced a benefit in all main efficacy assessments relative to their mean rate of decline with placebo treatment during the double-blind period (P<.05). Editorial comment is provided by Jeffrey L. Cummings, MD.

**Soluble Vascular Cell Adhesion Molecule 1 and N-terminal Pro-B-Type Natriuretic Peptide in Predicting Ischemic Stroke**

Campbell et al (page 60) assessed the prognostic value of soluble vascular cell adhesion molecule 1 (sVCAM-1) and N-terminal pro-B-type natriuretic peptide (NT-proBNP) in patients who had a previous stroke or transient ischemic attack for future ischemic stroke. In a well-designed and detailed study, they conclude that sVCAM-1 and NT-proBNP were independent predictors of recurrent ischemic stroke.

**Cognitive Evaluation in Asymptomatic Boys With X-linked Adrenoleukodystrophy**

Cox and colleagues (page 69) provide the first compelling evidence of overall normal cognitive function in boys with neurologically and radiologically normal findings with X-linked adrenoleukodystrophy, indicating no evidence of neurodevelopmental abnormalities despite the inherent ABCD1 mutation. Thus, prevention and timely institution of therapy
can potentially preserve cognitive function seen in the childhood cerebral phenotype of X-linked adrenoleukodystrophy. X-linked adrenoleukodystrophy should be considered as a candidate disorder for neonatal screening.

**Sensorimotor Function and Axonal Integrity in Adrenomyeloneuropathy**

Zackowski et al (page 74) provide data to understand how sensorimotor impairments create mobility deficits and how these impairments are related to specific metrics of axonal integrity. Impairment measures capture specific abnormalities in walking and balance that can be used to direct rehabilitation therapy.

**Patterns of Brain Atrophy That Differentiate Corticobasal Degeneration Syndrome From Progressive Supranuclear Palsy**

Boxer and colleagues (page 81) studied the structural neuroanatomical differences between corticobasal degeneration syndrome and progressive supranuclear palsy using voxel-based morphometry on magnetic resonance images in each subject group. They found highly specific patterns of brain atrophy in corticobasal degeneration syndrome and progressive supranuclear palsy that can be used to differentiate the 2 diseases.

**Neuropathology of Dementia in African American and White Individuals**

Wilkins et al (page 87) report no substantive differences in the neuropathology of Alzheimer disease among African American and white participants.

**Three-dimensional Patterns of Hippocampal Atrophy in Mild Cognitive Impairment**

Becker and colleagues (page 97) provide data measuring hippocampal volumes in patients diagnosed with subtypes of mild cognitive impairment relative to those of elderly controls and those of patients with Alzheimer disease using 3-dimensional mesh reconstructions.

**POLG and Multiple Deletions With Variable Phenotypes**

Gonzalez-Vioque et al (page 107) have studied patients with multiple mitochondrial DNA deletions comparing their molecular genetic findings with those of healthy controls. Polymerase γ (POLG) molecular defects account for 25% of the patients with multiple mitochondrial DNA deletions and mitochondrial disease.

**Concomitant Mutations in the PMP-22 Gene and Another Gene That Produce Novel Phenotypes**

Hodapp and colleagues (page 112) describe individuals having 2 separate mutations in neuromuscular disease–related genes who develop unusually severe phenotypes. Neurologists need to be alert to this possibility.

**Epilepsy in Patients With Angelman Syndrome Caused by Deletion of the Chromosome 15q11-13**

Valente et al (page 122) describe patients with Angelman syndrome with deletion expressing epilepsy with early onset and stereotyped by seizure type, severity, and response to antiepileptic drug therapy.