Treating Parkinson Disease

Schapira (page 1083) provides a state-of-the-art assessment of current therapies for Parkinson disease. His vast experience and clear style of writing give the reader a compelling and focused review of this important area of therapeutics.

Medication-Related Impulse Control and Repetitive Behaviors in Parkinson Disease

Voon and Fox (page 1089) describe the range of behaviors related to aberrant or excessive dopaminergic medications used for Parkinson disease. These behaviors are linked by their incentive- or reward-based and repetitive natures and include pathological gambling, hypersexuality, compulsive shopping, compulsive eating, hobbyism, and compulsive medication use. They point out the need to watch for these behaviors because they can have serious psychosocial consequences and can be readily managed with a medication change or reduction in dosage.

Detecting Awareness in the Vegetative State

Owen and colleagues (page 1098) present an exciting and provocative assessment of the vegetative state using functional magnetic resonance imaging (fMRI). Patients appear to be unaware of their environment, but fMRI studies indicate they are indeed conscious and aware as judged by specific fMRI activation responses to specific commands. A new level of insight and understanding has arrived for the patient diagnosed as being in a vegetative state.

Diffusion-Weighted Imaging With Transient Ischemic Attack and Future Stroke

Prabhakaran et al (page 1105) studied diffusion-weighted imaging (DWI) in patients with transient ischemic attacks (TIAs). Patients with TIAs with abnormal DWI results are distinct from patients who had TIAs with normal imaging results and completed ischemic stroke. These data suggest that a positive DWI with TIA may be a separate clinical entity with unique prognostic implications. Editorial perspective is provided by Louis R. Caplan, MD.

Cognitive Dysfunction and Blood Pressure During Coronary Artery Bypass Grafting

Gottesman and colleagues (page 1111) report on 15 patients undergoing coronary artery bypass graft operations who were at high risk for postoperative stroke. They found that a fall in mean arterial pressure from preoperative level to intraoperative level predicted a decrease in cognitive performance. They concluded that a fall in mean arterial pressure from a preoperative baseline does put patients at risk for early cognitive impairment after coronary artery bypass graft operations.

Cardiac Myxoma and Stroke

Lee et al (page 1115) describe their experience with 9 of 74 (12.2%) patients with cardiac myxoma who presented with neurologic deficits. Ischemic cerebral infarction was the most common neurologic manifestation (89%). The mobility, not size of the myxoma, appeared to be related to embolic potential.
New Myasthenia Gravis Classification Based on Autoantibody Status

Suzuki et al (page 1121) classified patients with myasthenia gravis into 4 groups based on their status regarding 3 myasthenia gravis–related autoantibodies: anti-Kv1.4, antititin, and anti–acetylcholine receptor. Clinical associations were found for each group. This new classification based on autoantibody status has merit because it provides correlations with clinical features and therapies.

Atrophy Patterns and Subtypes of Mild Cognitive Impairment

Whitwell and colleagues (page 1130) found that the pattern of atrophy in the amnestic groups of patients with mild cognitive impairment is consistent with the concept that mild cognitive impairment in most of these patients represents prodromal Alzheimer disease. However, the different patterns in the language and attention/executive groups suggest that these patients may have a different underlying disorder.

Evaluating Atypical Dementia Syndromes Using Positron Emission Tomography With Carbon 11–Labeled Pittsburgh Compound B

Ng et al (page 1140) explored the presence and topography of β amyloid as measured by carbon 11–labeled Pittsburgh Compound B (11C-PiB) in patients with atypical presentation of dementia. Fifteen healthy controls, 10 patients with Alzheimer disease, a patient with primary progressive aphasia, and a patient with posterior cortical atrophy underwent positron emission tomographic studies. The presence of distinctive focal 11C-PiB retention patterns was demonstrated in the 2 patients with atypical-onset dementia. Carbon 11–labeled PiB has the potential to facilitate differential diagnosis of dementia and identify patients who could benefit from specific therapeutic strategies directed at β amyloid reduction.

Characteristics of Frontotemporal Dementia and Progranulin Mutations

van Deerlin and colleagues (page 1148) found that patients with a progranulin (GRN) mutation have significant recognition memory deficits, but a significant language deficit exists only in patients without a GRN mutation.

Cognitive Loss With Neocortical Volume Changes in Multiple Sclerosis

Amato et al (page 1157) found that progressive neocortical gray matter loss is associated with cognitive loss in patients with relapsing-remitting multiple sclerosis.

Diffusion-Tensor Magnetic Resonance Imaging and Magnetic Resonance Spectroscopy and Deficits in Multiple Sclerosis

Pulizzi and colleagues (page 1163) used diffusion-tensor magnetic resonance imaging and whole brain N-acetylaspartate proton magnetic resonance spectroscopy to measure deficits in patients with relapsing-remitting and secondary progressive multiple sclerosis. They report that the accumulation of macroscopic lesions and normal-appearing white matter damage seems to occur mainly during the earliest clinical phases of multiple sclerosis, whereas gray matter pathological features may be the hallmark of the late progressive stage of the disease. These data, they believe, support the view of multiple sclerosis as a “2-stage” disease.

White Matter Volume and Cognitive Function in Sturge-Weber Syndrome

Juhasz et al (page 1169) report that early hemispheric white matter loss may play a major role in cognitive impairment in children with Sturge-Weber syndrome.

Dysferlin Gene Mutations With Atypical Phenotypes

Nguyen and colleagues (page 1176) indicate that Mioshi myopathy and limb-girdle muscular dystrophy type 2B are the 2 main dysferlinopathies caused by mutations in the dysferlin gene (DYSF). They find that besides these diseases, dysferlinopathies are a clinically heterogeneous group of disorders ranging from being asymptomatic to severe functional disability with recognizable, specific syndromes.