Consciousness Awakened

Young and Pigott (page 153) review current concepts of consciousness. They provide a clear, concise, and useable foundation to approach this basic and complex neurological state.

Congenital Myasthenic Syndromes

Engel and colleagues (page 163) provide an authoritative and scholarly review of the molecular genetics of the acetylcholine receptor and its clinical syndromes. Insights into future gene therapies are evident.

Antiamphiphysin Antibodies

Antoine and colleagues (page 172) describe patients with antiamphiphysin antibodies with associated neurologic disease including sensory neuronopathy, encephalomyelitis and breast cancer, limbic encephalitis with and without the Lambert-Eaton myasthenic syndrome, and small cell lung cancer with cerebellar degeneration. The spectrum of paraneoplastic disease continues to expand. These findings are put into perspective with an elegant editorial by Hassan Fathallah-Shaykh (page 151).

Fetal Nigral Transplants Work Long-Term

Hauser and colleagues (page 179) describe patients with bilateral fetal nigral transplantation into the putamen in patients with Parkinson disease, followed for as long as 24 months after transplantation. These patients showed long-term clinical benefit and increased fluorodopa uptake on positron emission tomographic scans. Important clinical-biological insights abound in this carefully designed study.

Cerebrospinal Fluid From Patients With Parkinson Disease Is Toxic

Cerebrospinal fluid samples from patients with Parkinson disease are shown in this study by Le and colleagues (page 194) to contain factors that cause specific dopaminergic neuronal cell injury. This in vitro quantitative system offers unique opportunities to study cytotoxic factors present in the cerebrospinal fluid of patients with Parkinson disease.

Subgrouping Alzheimer Disease With Lewy Bodies

Gearing et al (page 203) find that cases of Alzheimer disease with concomitant dementia with Lewy bodies can be divided into 2 subgroups based on the extent of neocortical fibrillary pathological findings. These findings have important implications for disease pathogenesis and treatment. The saga continues about neurofibrillary change.

Defining Laminin α2 Deficiency

Morandi and colleagues (page 209) describe results of their studies of Laminin α2 expression by immunohistochemistry and immunoblot using several antibodies. The extent of Laminin α2 deficiency in most cases correlated with the clinical phenotype but not with peripheral and central white matter abnormalities. Also, skin biopsies revealed, in some instances, Laminin α2 deficiency in patients with normal Laminin α2 levels in muscle. This study answers some questions about Laminin α2 expression but raises additional ones about its role and expression both in the central and peripheral nervous systems.

T Cells and Multiple Sclerosis

Bongioanni and colleagues (page 217) have studied the effects of interferon beta treatment on T-cell interferon gamma binding in patients with multiple sclerosis. This study advances significantly our knowledge of the effects of immunological therapy on T-cell responses in multiple sclerosis and presents new insights for future immunologically based therapies.

Magnetic Resonance Imaging and Multiple System Atrophy

Kraft and colleagues (page 225) have characterized the magnetic resonance imaging pattern in patients with multiple system atrophy and other basal ganglia disorders. They report that a pattern of hypointense and hyperintense T2 changes within the putamen is a highly specific magnetic resonance imaging sign of multiple system atrophy. These observations may have important, useful clinical application.

Cerebral Venous Thrombosis and Ultrasound

Serial transcranial Doppler ultrasound studies were conducted by Valdueza et al (page 229) in patients with cerebral venous thrombosis and they found that venous blood flow velocities can be successfully and easily measured as a means of monitoring these patients. There was a relationship between initially high venous flow velocities and severity of thrombotic disease. This approach seems highly credible and useful in the evaluation of this serious neurological disorder in patients.