in all domains of classroom functioning. A child's academic functioning is most important in assessing response to methylphenidate and the need for dose increments.

The need for subtyping is stressed by reports of brain structural changes in a group of 15 children with ADDH examined by MRI at the Massachusetts General Hospital.The splenial area of the corpus callosum was smaller in ADDH children compared to normal controls. Age was not a factor. (Semrud-Clikeman M et al. Attention-deficit hyperactivity disorder: Magnetic resonance imaging morphometric analysis of the corpus callosum. J Am Acad Child Adolesc Psychiatry July/Aug 1994;33:875-881).

Differences in brain glucose metabolism in girls with ADDH compared to boys are reported in PET studies at the National Institute of Mental Health, Bethesda, MD. Global cerebral glucose metabolism in 5 ADDH girls was 15% lower than in 6 normal girls, but was unchanged in ADDH boys compared to normal boys; it was 20% lower in ADDH girls compared to ADDH boys. Adolescents showed no changes in cerebral glucose metabolism. (Ernst M et al. Reduced brain metabolism in hyperactive girls. J Am Acad Child Adolesc Psychiatry July/Aug 1994;33:858-868).

Attention deficit hyperactivity disorder in adults is reviewed from the New York State Psychiatric Institute (Shaffer D. Am J Psychiatry May 1994;151:633-638. Editorial). Placebo-controlled studies of MPH in adults are infrequent and largely disappointing. Psychoactive substance use disorder is commonly associated with diagnoses of ADDH in adults and stimulant medication should be used with caution. Adult ADDH is often a self-diagnosed condition, and an excuse for job failure, divorce etc, according to one practicing psychiatrist.

## MRI CHANGES IN DYSLEXIA: A REAPPRAISAL

The convolutional surface area of the planum temporale, temporal lobe volume, and brain volume were compared by MRI in 17 dyslexic children (7 girls) and 14 controls (7 girls) at Yale University School of Medicine, New Haven. All measurements were significantly larger in boys. Age was directly correlated with brain region volumes. Analyses that controlled for age and overall brain size failed to confirm smaller left hemisphere structures previously reported in dyslexics. The authors suggest that differences in sex, age, handedness, and definition of dyslexia as well as methods of measurement of the planum temporale may explain apparent discrepancies in results of neuroimaging studies in dyslexic subjects. (Schultz RT et al. Brain morphology in normal and dyslexic children: The influence of sex and age. Ann Neurol June 1994;35:732-742). (Respond: Dr Shaywitz, Department of Pediatrics, PO Box 3333, New Haven, CT 06510).

COMMENT. This important study casts doubt on the significance of reports of differences in brain morphology in children with dyslexia and other learning disabilities. It should be noted in the Massachusetts General Hospital report of corpus callosal changes in ADDH children, a smaller splenium was unrelated to the age of the children. (see above).

Age-related changes in the brains of patients with Down's syndrome measured by MRI analyses are reported from the University of California, Irvine. (Kesslak JP et al. Neurology June 1994;44:1039-1045). A significantly larger parahippocampal gyrus, and smaller hippocampus and neocortex, are reported relative to age-matched controls.

The changing conception of mental retardation and the implications of the new 1992 American Association on Mental Retardation's (AAMR) definition and classification are outlined by psychologists, psychiatrists, pediatricians, pediatric neurologists, and educators. (Schalock RL et al. Mental Retardation June 1994;32:181-193). The 1992 System shifts the diagnostic effort from estimating the level of an individual's deficiency (mild, moderate, severe) to the intensities of needed supports (intermittent, limited, extensive, pervasive). Professional/clinical judgement is emphasized in assessments, and the terms educable and trainable are considered inappropriate. Special education services and supports are based on functioning level rather than IQ-derived levels of retardation. An etiological classification of biological or psychosocial categories is modified and expanded to a multifactorial approach which includes intergenerational and environmental factors. Research studies based on the new paradigm will emphasize environments and supports, quality of life, and a greater precision in definition.

## NEUROMUSCULAR DISORDERS

### MEDIAN MONONEUROPATHIES

The clinical and electromyographic characteristics of median mononeuropathy in 17 children, 6 girls and 11 boys, aged 5-17 years, are reported from the Departments of Neurology, Children's Hospital, Boston and the Lahey Clinic, Burlington, MA. EMG showed a lesion at the wrist in 7 children, including 3 with idiopathic carpal tunnel syndrome (CTS), 1 related to skiing. Proximal lesions were identified in 10 (59%), including 8 with trauma. Five had bilateral disease, 3 with CTS. Nontraumatic cases (7) presented with intermittent numbness characteristic of CTS, pain and weakness, and painless weakness and atrophy of the thenar eminence. Mucolipidosis III, scleroderma, cutaneous mucinosis, and osteoid osteoma at the elbow were etiological factors in 4. Symptoms improved in 4 patients. Traumatic cases (10) occurred mainly in boys (8). Five were secondary to an elbow injury and 2 to more distal fractures. A laceration was responsible in 2. Complete recovery occurred in 2 with nerve compression. The results of surgery were variable; of 5 who had surgical decompression for nerve entrapment 3 improved initially. (Deymeer F, Jones HR Jr. Pediatric median mononeuropathies: a clinical and electromyographic study. Muscle & Nerve July 1994;17:755-762). (Reprints: H. Royden Jones Jr, MD, Department of Neurology, Lahey CVlinic, 41 Mall Road, Burlington, MA 01805).

COMMENT. Carpal tunnel syndrome is more common in adults than children. A small thenar eminence in a child may be secondary to congenital thenar hypoplasia or congenital constriction bands.