

children with a history of absence seizures (Clinical EEG April 1992; 23:62-64).

PERCEPTUAL MOTOR AND SENSORY INTEGRATIVE THERAPY FOR LEARNING DISABILITIES

The effects of sensory integrative therapy (SI), perceptual motor training (PM) and no treatment (NT) were compared in 103 children with learning disabilities at the Department of Paediatrics, Division of Neurology and Department of Rehabilitation Medicine, Hospital for Sick Children, University of Toronto, Canada. After a total of 72 1-hour sessions for 3 hours per week the PM treated subjects showed significant gains over the other 2 groups, primarily in gross motor performance, but without any accompanying carry over into functional activities such as copying ability, printing readiness, attention or organizational skills. SI treated subjects showed improvement in motor planning. Neither therapy resulted in improvement in cognitive, language or academic performance, attention or self-concept. (Humphries T et al. A comparison of the effectiveness of sensory integrative therapy and perceptual-motor training in treating children with learning disabilities. J Dev Behav Pediatr Feb 1992; 13:31-40.) (Reprints: Tom Humphries, Ph.D., Child Development Clinic, Hospital for Sick Children, Toronto, Ontario, Canada M5G 1X8.)

COMMENT. Although the claim that occupational therapy may directly improve higher level academic, language, and cognitive performance has not been supported by these studies, perceptual motor and sensory integrative therapy appears to have positive effects on motor planning and gross motor functioning. The possible value of these refinements of motor performance in effecting functional ability awaits further evaluation.

SLEEP DISORDERS AND NEUROPSYCHOLOGICAL ABNORMALITIES

The IQ and neurodevelopmental quotients of 17 of 32 children with congenital central hypoventilation syndrome were determined at the Departments of Pediatrics and Psychology, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL. Sleep hypoventilation was severe in all cases, with an alveolar carbon dioxide pressure of 62 ± 2.5 mm Hg and a hemoglobin saturation of 65%. Seizures were associated in 72%, pulmonary hypertension in 78% and mild cerebral atrophy in 40%. All patients were hypotonic or had major motor delays. Autopsy performed in 6 cases showed diffuse central nervous system astrocytosis, gliosis, and atrophy but no brain-stem abnormality. The IQ and developmental quotients varied from greater than the 85th percentile to less than the 5th percentile, with verbal and performance discrepancies. The data support a diffuse central nervous system process but the possible effects of transient hypoxemia on neurodevelopmental test results could not be definitely determined (Weese-Mayer DE, Silvestri JM et al. J Pediatr March 1992; 120:381-7 and 388-93). (Reprints: Dr. Weese-Mayer, Department of Pediatrics, Rush-Presbyterian-St. Luke's Medical Center, 1653 West Congress Parkway, Chicago, IL 60612.)