ADHD AND MOTOR PERCEPTION DYSFUNCTION COMORBIDITY

The epidemiology, co-morbidity and overlap of attention deficit hyperactivity disorder (ADHD) and deficits in attention, motor control and perception (DAMP), as defined in Scandinavia, were assessed in a total population of 589 6-year-old children screened for neurodevelopmental and neuropsychiatric disorders at the Skovde Central Hospital, and the University of Göteborg, Sweden. Among 63 children (10.7%) with identified disorders, the prevalence rates for ADHD and DAMP were 2.4-4% and 5.3-6.9%, respectively. One in four to three in four of children with DAMP had ADHD. Attention problems were more pronounced in the ADHD group, but overactivity and impulsivity did not distinguish ADHD from DAMP. Children with DAMP had, by definition, more deficits in perception and motor function. (Landgren M, Pettersson R, Kjellman B, Gillberg C. ADHD, DAMP and other neurodevelopmental/psychiatric disorders in 6-year-old children: epidemiology and co-morbidity. Dev Med Child Neurol Oct 1996;38:891-906).

COMMENT. The Scandinavian syndrome of DAMP emphasizes the association of neurological signs of motor dysfunction, perceptual dysfunction, and attention deficits, whereas the current American DSM criteria for ADHD include only symptoms of inattentiveness, hyperactivity, and impulsivity, excluding reference to tests for neurological and perceptual dysfunction. The overlap of these syndromes and the higher prevalence of DAMP compared to ADHD suggests that the neurological examination and tests for perceptual dysfunction should form an integral part of the criteria for diagnosis of the attention deficit disorders (ADHD). A return to the former minimal brain dysfunction (MBD) criteria, in addition to symptoms of ADHD, would allow a more objective diagnosis and earlier recognition and remediation of associated motor incoordination and perceptual deficits.

Conflicting parent and teacher reports of problem behaviors were noted in children with reading disabilities and/or ADHD in a study at the University of Houston. (Pisecco S et al. J Am Acad Child Adolesc Psychiatry Nov 1996;35:1477-1484). In evaluating a child for ADHD, it is important to obtain both teacher and parent reports.

PRENATAL AND PERINATAL DISORDERS

INTRAVENTRICULAR HEMORRHAGE AND COGNITION

The effects of premature birth-related subependymal and mild intraventricular hemorrhage (S/IVH) on specific cognitive abilities in 2-year-old children were investigated at the Perinatology Center, New York Hospital, and Cornell and New York University Medical Colleges. Of 82 children included in the study, 27 had premature births complicated by Grade I or II hemorrhages, 28 prematurely born children had normal neonatal ultrasound, and 27 were born at term without complications. The premature group with S/IVH at birth performed significantly less well than children without hemorrhage on a measure of memory for location and on ability to change response set. Both groups of prematurely born children performed less well than full term children on systematic search for an object when the order of hiding was reversed. All groups performed equally on a visual attention task.