infection and FC have no worse prognosis than those without (Rantala H et al. J Pediatr 1990;116:196-199).

Do complex FCs have a different mechanism from the simple FC or do they both result from fever and infection which, in the complex FC, is neurotropic and encephalopathic and associated with a greater cytokine response? Future studies in the etiology of FCs should emphasize the role of viral infection and cytokines and require the expertise of the specialist in infectious disease. It is appropriate that influenza vaccination is now recommended in infants ages 6-35 months as well as older children.

ATTENTION DEFICIT DISORDERS

FINE AND GROSS MOTOR ABILITY IN MALES WITH ADHD

Both fine and gross motor abilities were evaluated in 10-year-old males with attention deficit hyperactivity disorder (ADHD) and compared to a group of control children at the School of Psychology, Curtin University of Technology, Perth, Australia. Movement ability was assessed using the Movement Assessment Battery for Children (MABC) and the Purdue Pegboard test. Children with ADHD had impaired movement ability compared to controls. Comparison of the Total Impairment scores derived from the MABC and fine motor ability scores showed that the ADHD-predominantly inattentive (-PI) group (n=50), and ADHD-combined (-C) group (n=38) were significantly impaired (p<.001), whereas the ADHD-hyperactive/impulsive (-HI) group (n=16) was less affected. The percentage of children with motor impairment consistent with developmental coordination disorder (DCD) was 10% in controls compared to 42% in ADHD-PI, 31% in ADHD-HI, and 29% in ADHD-C. Poorer fine motor ability in ADHD was not attributed to deficits in attention and concentration, and the evaluation of motor ability should be included in the diagnostic criteria for ADHD. (Pitcher TM, Piek JP, Hay DA. Fine and gross motor ability in males with ADHD. Dev Med Child Neurol August 2003;45:525-535). (Respond: Jan P Piek PhD, School of Psychology, Curtin University of Technology, GPO Box U1987, Perth 6845, Australia).

COMMENT. The relation between ADHD and motor coordination difficulties, as envisioned in the syndrome of minimal brain dysfunction (MBD) (Clements SD. 1966), has been neglected in favor of a symptomatic approach to diagnosis. Swedish research has emphasized the association of Deficits in Attention, Motor Control, and Perception (DAMP), and Gillberg (1998) suggests that children with DAMP meet criteria of DSM-IV ADHD and Developmental Coordination Disorder. Huttenlocher PR et al (1990) and Millichap JG (1974) have reported the predictive value of subtle neurologic abnormalities for learning disabilities and ADHD. Poor fine motor ability in children with ADHD is not the result of ADHD symptomatology but rather reflects a comorbid developmental coordination disorder and neurologic deficit. The recognition of coordination problems as a frequent (50%) and integral part of the ADHD syndrome would lead to early physical and educational accommodations and improved prognosis. (see <u>Progress in Pediatric</u> Neurology III, PNB, 1997;pp195-205, for ADHD and brain dysfunction).