

children with Tourette syndrome and attention deficit hyperactivity disorder. Neurology Aug 1996;47:477-482). (Reprints: Dr Thomas L Baumgardner, Behavioral Neurogenetics and Neuroimaging Research Center, Kennedy Krieger Institute, 707 N Broadway, Suite 509, Baltimore, MD 21205 or Dr HS Singer, Department of Neurology, Harvey 811, Johns Hopkins Hospital, 600 N Wolfe St, Baltimore, MD 21287).

COMMENT. The authors comment that TS and ADHD may result from distinct neurodevelopmental processes, and the three syndrome groups, comprising TS only, ADHD, and TS + ADHD, may represent different degrees of expression of the same gene. In addition to genetic transmission, environmental influences include prenatal factors, anabolic steroids, and antineural antibodies induced by streptococcal infection. (Singer HS, in Progress in Pediatric Neurology II, 1994, pp 227-231).

## LEARNING DISABILITIES AND TOURETTE'S SYNDROME

A retrospective study of 138 children with Tourette's syndrome examined the contribution of neurobehavioral concomitant symptoms to academic difficulties in the Department of Neurology, and Division of Biostatistics, University of Rochester Medical Center, Rochester, NY. A diagnosis of specific learning disorder (LD) was made in 30 (22%). Among 108 without a diagnosis of LD, 36 (33%) had school problems that included grade retention in 16 (15%) and/or special education placement in 41 (38%). The association of ADHD with TS was a significant predictor of school problems. (Abwender DA et al. School problems in Tourette's syndrome. Arch Neurol June 1996;53:509-511). (Respond: Dr Como, Department of Neurology, Box 673, University of Rochester Medical Center, 601 Elmwood Ave, Rochester, NY 14642).

COMMENT. Even when children with specific learning disabilities are excluded, TS is associated with academic problems in one third. Tics themselves were not the reason for the school problems, but rather the associated comorbid ADHD. These findings confirm those of the Johns Hopkins group of investigators, who found that children with TS + ADHD were at higher risk for a specific learning disability than those with TS alone (32% v 0%). (Schuerholz LJ et al. Neurology 1996;46:958-965).

For those readers interested in history, Lajonchere C et al, from Washington University, St Louis, MO, have published an English-language translation of an 1884 article by Gilles de la Tourette that led to his description of the Tourette syndrome published in 1885. (Arch Neurol June 1996;53:567-574).

## ENDOCRINE DISORDERS AND COGNITION

### ATTENTION DEFICITS AND THYROID FUNCTION

The relation between attention and thyroid function was examined in 85, 7-year-old, children with congenital hypothyroidism (CH) at the Hospital for Sick Children, Toronto, Canada. Children were assigned to subgroups on the basis of concurrent T4 and TSH levels. Almost 10% of children with CH had abnormally high levels of T4 and TSH. Those with this abnormal thyroid profile did not differ from other CH children in intelligence but they did perform more poorly on a measure of cognitive attention, while rating more favorably on parent behavior scales of hyperactivity and distractibility. The level of T4 was the strongest predictor of poorer cognitive attention, while TSH