

cerebral blood flow and oxygen metabolism were abnormal and the cerebral metabolic rate of oxygen and oxygen extraction fraction were low. Impaired oxidated metabolism in Rett syndrome is suggested by this study. (Yoshikawa H et al. J Child Neurol July 1991; 6:237-242).

A significant increase in B-endorphin in the cerebrospinal fluid, an elevation of the CSF/Plasma B-endorphin ratio and a decrease in CSF cortisol are reported in a study of 15 girls with Rett syndrome at the Unite de Neuropediatrie, Centre Gui de Chauliac, Montpellier, France. The plasma cortisol and B-endorphin levels were similar in the patient and control groups (Echenne B et al. J Child Neurol July 1991; 6:257-262). The authors comment that the inconsistent nature of the CSF endorphin increase exclude its use as a biologic marker of Rett syndrome.

## **LEARNING AND BEHAVIOR DISORDERS**

### **TRIAL OF METHYLPHENIDATE AND THIORIDAZINE**

A double-blind, placebo-controlled, cross-over study of methylphenidate (0.4 mg/kg/day) and thioridazine (1.75 mg/kg/day) in 27 intellectually subaverage children is reported from The Nisonger Center for Mental Retardation and Developmental Disabilities, Ohio State Univ., Columbus, OH, and the University of Auckland, New Zealand. IQs ranged from 30-90 with a mean of 54 of the Stanford Binet, Form L-M. Ages ranged from 4 to 16 years; 22 boys and 5 girls. ADD-H was diagnosed in 21 and the hyperactivity was severe (a score of 19 on the Conners Parent-Teacher Questionnaire). Epilepsy was treated with anticonvulsants in 4. Methylphenidate improved accuracy on a memory task, reduced omission errors on an attentional task, and reduced seat movements on 2 tasks. Thioridazine had no adverse effect on IQ and cognitive-motor performance tests. (Aman MG et al. Methylphenidate and thioridazine in the treatment of intellectually subaverage children: effects on cognitive-motor performance. J Am Acad Child Adolesc Psychiatry September 1991; 30:816-824).

**COMMENT.** Methylphenidate and thioridazine are two of the most commonly used psychotropic drugs in treating mentally retarded children. In this study involving children with mild developmental delays, methylphenidate improved attention and motivation and thioridazine at relatively low dose levels had no adverse effects on learning performance. A combination of methylphenidate AM and Noon and thioridazine PM is sometimes recommended in children with ADHD of normal intelligence who exhibit behavioral problems both during and after school hours. The present study corroborates the probable benefits of this combination therapy.