Bahr L, Theorell K. Motor impairments in children with epilepsy treated with carbamazepine. <u>Acta Paediatr</u> April 1997;86:372-376). (Respond: Dr G Braathen, Department of Paediatrics, Huddinge University Hospital, S-141 86 Huddinge, Sweden).

COMMENT. Fine motor coordination impairments in children with epilepsy treated with carbamazepine may be explained by effects of the antiepileptic drug.

Cerebellar adverse effects of carbamazepine are reported in 9 (35%) of 26 young adults with chronic focal epilepsy treated at the Klinik Mara 1, Epilepsie-Zentrum Bethel, Bielefeld, Germany. (Specht U, May TW, Rohde M et al. Cerebellar atrophy decreases the threshold of carbamazepine toxicity in patients with chronic focal epilepsy. Arch Neurol April 1997;54:427-431). Serum concentrations of CBZ at onset of ataxic side-effects were related to occurrence of cerebellar atrophy on MRI. Patients showing cerebellar atrophy developed ataxia, nystagmus, and dizziness at lower CBZ levels than those without cerebellar atrophy.

EPILEPSY, ADHD, AND METHYLPHENIDATE

The effects of methylphenidate in thirty children, ages 6 to 16, with epilepsy and ADHD were evaluated in a 4-month period at Shaare Zedek Medical Center, Hadassah-Hebrew University, Jerusalem, Israel. Using a double-blind, crossover design, patients received EEGs, AED level determinations, and continuous-performance tasks during treatment with AEDs only, and with the addition of methylphenidate (MPH), 0.3 mg/kg each morning, or placebo. Three of 5 children with seizures had exacerbation of attacks (3 to 7 attacks per week) while taking MPH, while 25 without seizures continued to be seizure-free. MPH improved ADHD symptoms and continuous-performance task scores. (Gross-Tsur V, Manor O, van der Meere J, Joseph A, Shalev RS. Epilepsy and attention deficit hyperactivity disorder: Is methylphenidate safe and effective? J Pediatr April 1997;130:670-674). (Reprints: Ruth Shalev MD, Pediatric Neurobehavioral Unit, Shaare Zedek Medical Center, POB 3235, Jerusalem, Israel).

COMMENT. Methylphenidate (MPH) may be a safe and effective treatment for ADHD complicating childhood epilepsy, provided that patients are receiving antiepileptic drugs when MPH is initiated and that seizures are under satisfactory control. Patients with persisting seizures despite AEDs may have an exacerbation with MPH. Existing studies do not address the problem of patients with ADHD in whom a predisposition to seizures may be overlooked before stimulant therapy is introduced. Furthermore, the effects of Ritalin® may be different from generic MPH.

Ritalin-induced seizures in two children with ADHD. Two boys, ages 8 and 11 years, were seen in the ADD Clinic, Division of Neurology, Children's Memorial Hospital, Chicago, with a history of convulsive seizures after Ritalin had been introduced for treatment of ADHD. With the addition of carbamazepine and withdrawal or reduction in dosage of Ritalin, seizures had not recurred. (Millichap JG, Swisher CN. Manuscript in preparation).

TOURETTE SYNDROME

METABOLIC ANATOMY OF TOURETTE'S SYNDROME

A Scaled Subprofile Statistical Model (SSM) of regional metabolic covariation was employed to identify functional brain networks in 10 Tourette