and 78% either approved or were indifferent to its use. Improved concentration and improved ability to sit still in the classroom were the most frequently reported benefits. Difficulty getting to sleep and decreased appetite were the most common side effects, and at least one negative aspect of therapy was reported in 82.2% of children. Only five children (11%) would stop taking stimulant medication if they could; these were more likely to perceive medication as unhelpful if they were receiving standard methylphenidate rather than a long-acting preparation. The authors conclude that children's perspectives on medication should be elicited directly and a sustained release medication may be more acceptable to children with ADHD. (Bowen J et al. Stimulant medication and attention deficit-hyperactivity disorder. The child's perspective. AJDC March 1991; 145:291-295).

COMMENT. The need to take stimulant medication while at school may be an important factor in the child's attitude, and compliance for prescribed therapies can be improved by decreasing the complexity or inconvenience of the therapy. Previous studies have shown that standard methylphenidate is superior to sustained release preparations on measures of disruptive behavior and cognitive performance. In contrast to advertising material, the effects of sustained release and standard methylphenidate were not equivalent. Pemoline or slow release dextroamphetamine were recommended in preference to sustained release methylphenidate, if a single daily dose sustained effect is required. (Pelham WE Jr et al. Pediatrics 1987; 80:491; Ped Neur Briefs Oct 1987).

SEIZURE DISORDERS

REFLEX EPILEPSY INDUCED BY "SOROBAN", A JAPANESE CALCULATOR

Three patients with reflex epilepsy and myoclonic jerks of the right arm and fingers precipitated by calculation using a Soroban are reported from the Department of Neuropsychiatry, Osaka University Medical School, Fukushima-ku, Osaka, Japan. The Soroban (abacus) is a Japanese traditional calculator requiring complex finger movements. Calculations are made by moving the counter beads with the fingers. The quicker the fingers move the sooner the calculation is finished. A simultaneous mental task requiring a high degree of concentration and complicated and delicate finger movements was necessary to induce the epileptic discharges consisting of a spike wave complex with left central prevalence. The reflex epilepsy in these patients resembled that induced by writing. Valproate was effective in the control of seizures and epileptic discharges. (Yamamoto J et al. Reflex epilepsy induced by calculation using a "Soroban," a Japanese traditional calculator. Epilepsia Jan/Feb 1991; 32:39-43).

COMMENT. Both mental activity under high psychological tension and complicated and delicate movements of the fingers were necessary to induce epileptic discharges and/or a clinical seizure in these patients; stimulation without these two factors

had no effect. Other reflex epilepsies induced by higher mental activity include reading epilepsy, graphogenic epilepsy induced by writing, language induced epilepsy induced by reading, writing, and speaking, epilepsia arithmetices induced by calculation, decision making epilepsy induced by cards and game playing, and drawing induced seizures induced by geometric designs. Nintendo and Rubik's cube may also cause reflex epilepsy.

CORPUS CALLOSOTOMY FOR INTRACTABLE SEIZURES

The results of corpus callosotomy in 18 patients 16 years old and younger are reported from the Sections of Neurology and Neurosurgery, Dartmouth-Hitchcock Medical Center, Hanover, NH. A significant improvement with a decrease in seizure frequency of greater than 80% occurred in 83% of patients having generalized atonic, tonic, or tonic-clonic seizures. There was no postoperative deterioration in behavior, memory, or language function when the callosotomy was performed as a two stage procedure. Some patients had a very mild and transient hemiparesis that resolved in a few days but none developed persistent mutism, a reported complication in other series. Many generalized seizures were converted to focal seizures postoperatively. Partial seizures are usually not responsive. Patients with evidence of unilateral disease tend to have the best results from callosotomy while those with generalized infantile spasms, Lennox-Gastaut syndrome, or anoxic encephalopathy have less predictable results. Mental retardation is not a contraindication and improvement in control of the seizures may improve behavior and cognitive functioning. (Nordgren RE et al. Corpus callosotmy for intractable seizures in the pediatric age group. Arch Neurol April 1991; 48:364-372).

COMMENT. Callosotomy may be considered in young patients with frequent generalized atonic, tonic, and tonic-clonic seizures. Early surgical intervention may prevent the adverse effects of frequent recurrent seizures and the possibility of kindling.

CORTICOSTEROIDS FOR LANDAU-KLEFFNER SYNDROME

Four children between five and nine years of age with Landau-Kleffner syndrome were treated with ACTH or corticosteroids at the Department of Pediatrics, Beilinson Medical Centre, and Sackler Faculty of Medicine, Tel Aviv University, Israel. ACTH in one patient was given for three months starting with 80 units/day followed by a gradual reduction of the dose. An EEG three weeks after the start of the treatment showed complete disappearance of epileptic activity but the aphasia was initially unchanged. Complete remission of the aphasia occurred eight months after the completion of the ACTH course. Two years later the aphasia recurred with the concomitant appearance of multiple spike discharges on the EEG. Prompt prescription of ACTH therapy led to a recovery of speech and a normal EEG within a few weeks. Prednisone 60 mg/day for two to three months in two patients caused a prompt improvement in the EEG followed by normal speech. Dexamethasone 4 mg/day resulted in full recovery of speech and a