layered thickened cortex) was investigated using specific antibodies against the protein product of LIS-1, the gene responsible for MDS phenotype, at the National Center of Neurology and Psychiatry, Kodaira, Tokyo. (Isumi H, Takashima S, Kakita A, et al. <u>Pediatr Neurol</u> Jan 1997;16:42-44). Loss of LIS-1 immunoreactivity occurred in brains with MDS, but not with isolated lissencephaly, holoprosencephaly, Fukuyama-type congenital muscular dystrophy, and Zellweger syndrome. Loss of LIS-1 gene product is specific to the abnormal neuronal migration in Miller-Dicker syndrome.

## UNTREATED TONIC-CLONIC SEIZURE OUTCOME

The clinical course of untreated tonic-clonic seizures in 204 children aged 1 month to 16 years was studied at the University Hospital Rotterdam, Netherlands. Follow-up continued until start of drug treatment (78), the fourth untreated seizure (41), or for two years without treatment (85). Forty-two per cent had a decelerating pattern; they were free of seizures despite treatment being withheld. Of 41 with four or more untreated seizures, 8 had an accelerating pattern, the intervals between seizures becoming shorter. In 110 children the disease process could not be classified because treatment was started after the first, second, or third seizure. (Van Donselaar CA, Brouwer OF, Geerts AT, et al. Clinical course of untreated tonic-clonic seizures in childhood: prospective, hospital based study. BMI 8 Feb 1997;314:401-404). (Respond: Dr CA van Donselaar, St Clara Hospital, Olympiaweg 350, 3078 HT Rotterdam, Netherlands)

COMMENT. Previous reports of an accelerating pattern, or decreasing interval between successive untreated seizures, support the concept that seizures beget seizures (Gowers, 1881) and early introduction of antiepileptic drug treatment is recommended. The present study fails to confirm the fear that untreated tonic-clonic seizures will evolve into a progressive disorder, and favors a delay in treatment. An individualized approach is probably most appropriate, each child's treatment based on factors predictive of seizure recurrence. For further reference to treatment onset and epilepsy prognosis, see Progress in Pediatric Neurology II, PNB Publ, 1994:pp92-93.

The risk for psychiatric and psychosomatic disorders is higher than expected in adults with childhood-onset epilepsy, regardless of continued treatment with AEDs, in a study at the University of Turku, Finland. (Jalava M, Sillanpaa M. Concurrent illnesses in adults with childhood-onset epilepsy: a population-based 35-year follow-up study. Epilepsia Dec 1996;37:1155-1163).

## BENIGN EPILEPSY WITH C-T SPIKES (BECT) OUTCOME

A meta-analysis of 13 cohorts, comprising 794 patients, selected according to ILAE and other criteria from 525 publications on BECT, was conducted at Leiden University Hospital, Netherlands. Age at onset ranged from 3 months to 14 years, and age at last seizure ranged from 3 to 18 years. At an older age, the proportion of patients in remission was 0.9997. Despite this apparent excellent prognosis, the outcome of BECT in a child just developing seizures could not be determined satisfactorily from the meta-analysis, because of the retrospective design and unclear selection of patients studied. (Bouma PAD, Bovenkerk AC, Westendorp RGJ, Brouwer OF. The course of benign partial epilepsy of childhood with centrotemporal spikes: a meta-analysis. Neurology Feb 1997;48:430-437). (Reprints: Dr PAD Bouma, Department of Neurology, Leiden University Hospital, PO Box 9600, 2300 RC Leiden, Netherlands).

COMMENT. AED treatment was started in 81.6% of the patients in the