thymectomized (43%) patients was a reflection of disease severity and poor response to medication.

In a report of 35 juvenile myasthenics treated at the Massachusetts General Hospital, 86% of 21 who underwent thymectomy had complete or partial remission compared to 93% of 14 treated only with medication. A higher rate of complete remission and drug withdrawal was obtained in the thymectomized group, however (29% v 14%). (Millichap JG, Dodge PR. Neurology 1960;10:1007). The earlier the surgery, the better the chance of remission (see Ped Neur Briefs April 1992:6:30).

## SEIZURE DISORDERS

## TEMPORAL LOBE EPILEPSY: ELECTROCLINICAL FEATURES

Results of video-EEG, PET, MRI, and pathological findings in 14 children aged 16 months to 12 years who were seizure-free after temporal lobectomy are reported in a multicenter, international study at Cleveland, Singapore, Naples, and Helsinki. In 4 children with mesiotemporal sclerosis and in 1 with cortical dysplasia, EEG showed anterior/inferior temporal interictal sharp waves and unilateral temporal seizure onset. In 9 with low- grade temporal neoplasms, the EEG findings were complex, including multifocal interictal sharp waves or falsely lateralized EEG seizure onset. Video-EEG recording was most useful for localization of the epileptogenic zone for resection in those without tumors. In patients with tumors, video-EEG confirmed the epileptic nature of the complex partial seizures but was of less localizing value. (Wyllie E et al. Temporal lobe epilepsy in early childhood. Epilepsia Sept/Oct 1993;34:859-868). (Reprints: Dr E Wyllie, Pediatric Epilepsy Program, Cleveland Clinic Foundation, 9500 Euclid Ave, Cleveland, OH 44195).

COMMENT. Three of 4 patients in this study with mesiotemporal sclerosis had a history of infantile compex febrile seizures compared with none of 10 with tumor or cortical dysplasia. An excellent outcome after temporal surgical resection in a group of 19 patients with mesiotemporal sclerosis following prolonged febrile convulsions is reported from the Montreal Neurological Institute (Abou-Khalil B, Andermann F et al. <u>Epilepsia</u> Sept/Oct 1993;34:878). The response and seizure control in this group was significantly better than in those without antecedent febrile convulsions.

In 15 children with temporal lobe epilepsy, aged 7-14 years, studied at the Royal Children's Hospital, Melbourne, Australia, ictal SPECT provided reliable lateralizing information to confirm that obtained from surface EEG and MRI. In 4, ictal SPECT was superior to

ictal EEG in localizing value. (Harvey AS et al. <u>Epilepsia</u> Sept/Oct 1993;34:869).

Anterior left temporal lobectomy and seizure control had an apparent beneficial effect on illogical thinking in a group of 7 children treated for intractable temporal lobe epilepsy at the University of California at Los Angeles (Caplan R, Shields WD et al. <a href="#">I Am Acad Child</a> Adolesc Psychiatry, 1993;32:604).

## CORPUS CALLOSTOMY FOR INTRACTABLE EPILEPSY

The response to corpus callosal section in 64 patients with intractable epilepsy was evaluated in a multicenter study in Australia. Age at time of operation ranged from 3 years to 47 years (mean age 20 years): 43% underwent callosotomy during childhood, at age <16 years. Mean age of onset of epilepsy was 5 years, and mean duration of epilepsy before surgery was 15 years. The most common seizure patterns were generalized tonic-clonic (GTC) (83%) and drop attacks (73%). Focal seizures occurred in 42%, of whom half had seizures of frontal lobe origin. The rate of favorable outcome was 60% for drop attacks, 47% for tonic seizures, 49% for GTCs, and 55% for complex partial seizures. Outcome for drop attacks was more favorable with unilateral seizure activity or generalized slow spike and wave, characteristic of Lennox-Gastaut syndrome; bilateral independent spikes, and severe mental retardation carried a poor prognosis. Improvement followed complete callosotomy in 6 of 10 patients not benefited by anterior callosotomy. (Reutens DC et al. Corpus callosotomy for intractable epilepsy: Seizure outcome and prognostic factors. Epilepsia Sept/Oct 1993;34:904-909). (Reprints: Dr SF Berkovic, Department of Neurology, Austin Hospital, Heidelberg, Victoria, Australia 3084).

COMMENT. In children with medically intractable epilepsy, especially drop attacks of focal or Lennox Gastaut types and CPS of frontal lobe origin, corpus callosotomy should be considered when focal resection is not appropriate. Surgical complications are reported to be mild, and include transient hemiparesis and mutism.

Satisfactory seizure control is reported in 25 (74%) of 34 children following corpus callosotomy performed at the Institute of Neurology, Goiania, Brazil. (Cendes F et al. Epilepsia Sept/Oct 1993;34:910). The majority had mental retardation. Atonic seizures responded best, followed by tonic, GTC, and atypical absence seizures. CPS and myoclonic seizures were not controlled. Of 26 patients with behavior problems, 81% had a significant decrease in aggressiveness, hyperactivity, and/or attention deficit. Total section was complicated by interhemispheric disconnection symptoms. Mutism, dysarthria, or gait dyspraxia persisted in 5 of 13 patients affected. Section limited to the anterior two thirds was uncomplicated. The neurophysiological basis for corpus callosotomy is the interruption of bilateral ictal synchrony.