relapse in untreated patients were 0.33, 0.62, and 0.77 and, in the treated group, 0.1, 0.2, and 0.4, after 12, 24, and 36 months, respectively. Treated men were less susceptible to recurrence than treated women. EEG abnormalities were observed in 20% of both treated and untreated patients, and rate of seizure recurrence was not correlated with EEG epileptiform activity. Treatment consisted of carbamazepine (10 mg/kg/day) in 36 (80%) patients; it had to be changed to valproic acid (600-1200 mg/d) in 9 (20%). (Gilad R, Lampl Y, Gabbay U, Eshel Y, Sarova-Pinhas I. Early treatment of a single generalized tonic-clonic seizure to prevent recurrence. Arch Neurol November 1996;53:1149-1152). (Reprints: Ronit Gilad MD, Department of Neurology, the Edith Wolfson Medical Center, Holon 58100, Israel).

COMMENT. The age range of these patients was 18 to 50, mean 30 years. Studies in children and adolescents might show different results. The benefits of immediate anticonvulsant treatment in these adults is apparent, but the decision to begin treatment after a single seizure must be made on an individual basis, having regard to drug toxicity on the one hand and the adverse consequences of a seizure recurrence on the other. Risk factors for recurrence of seizures, with and without therapy, require further study in children and adult populations. Previous studies have shown seizure recurrence rates varying from 33 to 80%.

RASMUSSEN ENCEPHALITIS: SURGICAL BENEFITS

Social communication, language, and PET glucose utilization were studied before and after right hemispherectomy in four children with Rasmussen encephalitis (RE) at the University of California, Los Angeles. Improved social communication and language following surgery was related to age at onset, duration of illness, and reversibility of the hypometabolism in the nonresected prefrontal cortex. Improvements in communication and language were not accompanied by improved IQ scores. Early surgical treatment might lessen the degree of deficit in communication and language skills. Onset of RE after age 11 years is associated with less social communication deficit. (Caplan R, Curtiss S, Chugani HI, Vinters HV. Pediatric Rasmussen encephalitis: social communication. language, PET, and pathology before and after hemispherectomy. Brain Cogn Oct 1996;32:45-66). (Reprints: Dr R Caplan, Neuropsychiatric Institute, 760 Westwood Plaza, Los Angeles, CA 90024).

COMMENT. Right hemisphere damage is associated with delays in language development. Surgery performed early to control seizures prevents further deterioration in intellectual functioning and results in improved language and communication skills.

CNS NEOPLASMS

PROGNOSIS OF INTRACRANIAL EPENDYMOMAS

Grading and localization of 67 intracranial ependymomas operated on in children less than 15 years of age from 1951 to 1990 were correlated with prognosis in a retrospective study at the University of Koln, Germany. Grade II ependymomas (38) were located in the IV ventricle and supratentorial midline, making complete removal impossible. The majority of grade III anaplastic, malignant tumors (28) were in the cerebral hemispheres and were totally removed. Operative mortality was higher in grade II than grade III. Median

progression-free survival time was 120 months for grade II and 18 months for grade III ependymomas. (Ernestus R-I, Schroder R, Stutzer H, Klug N. Prognostic relevance of localization and grading in intracranial ependymomas of childhood. Child's Nerv Syst Sept 1996;12:522-526). (Respond: Dr Ralf-Ingo Ernestus, N Klug Klinik fur Neurochirurgie der Universitat zu Koln, Joseph-Stelzmann-Strasse 9, D-50924 Koln, Germany).

COMMENT. As might be expected, the progression-free survival time is longer for the grade II ependymomas than the anaplastic grade III tumors, despite incomplete operative removal of the less malignant type.

Prognosis of cerebral oligodendrogliomas is studied in 15 children operated on at the Hopital Pierre Wertheimer, Lyon, France. Two groups were recognized: 1). Seven presenting with epilepsy had benign tumors and all survived at 72-month follow-up; 2). Eight presenting with intracranial hypertension had malignant anaplastic tumors, and 6 died within 17 months despite postoperative radiotherapy and chemotherapy. Clinical presentation and histology were correlated with survival time. (Rizk T, Mottolese C, Bouffet E et al. Cerebral oligodendrogliomas in children: an analysis of 15 cases. Child's Nerv Syst Sept 1996;12:527-529).

METABOLIC AND ENDOCRINE DISORDERS

MATERNAL DIABETES AND INFANT INTELLIGENCE

The intellectual development of 33 children born to 33 diabetic Japanese mothers (ODM) was compared to that of 34 control offspring of non-diabetics delivered at Kurume University Hospital, Fukuoka, Japan, between 1987 and 1989. Intelligence scores on the Tanaka-Binet test were significantly lower in the ODMs at 3 years of age than in controls. Maternal age and infant IQ were inversely correlated in ODMs but not in controls. (Yamashita Y, Kawano Y, Kuriya N et al. Intellectual development of offspring of diabetic mothers. Acta Paediatr Oct 1996;85:1192-1196). (Respond: Dr Y Yamashita, Department of Paediatrics and Child Health, Kurume University School of Medicine, 67 Asahi-machi Kurume-city, Fukuoka 830, Japan).

COMMENT. Infants of diabetic mothers may be at risk for impaired intellectual development, and especially infants born to older mothers. The difference in IQ between offspring of diabetics and non-diabetics was not associated with maternal toxemia or postnatal hyperbilirubinemia or hypoglycemia. A longer period of follow-up was considered important in determining the final cognitive outcome of these children.

Severe hypoglycemia and cognitive impairment in diabetes is reviewed and the link is considered not proven in a report from the Department of Psychology, University of Edinburgh, and Department of Diabetes, Royal Infirmary of Edinburgh. (Deary IJ, Frier BM. BMJ 28 Sept 1996;313:767-768). Among young adults with insulin dependent diabetes, recurrent episodes of severe hypoglycemia over a 5 to 15 year period have either a mild or negligible effect on cerebral function, except for a few subjects who are unusually vulnerable and suffer permanent brain damage. While strict glycemic control delays onset of retinopathy, nephropathy, and neuropathy, it is associated with a threefold increase in severe hypoglycemia.