The relation of brain myelination to the development of language in 100 infants and toddlers is investigated using three dimensional MRI at the University of Barcelona, Spain. (Pujol J, et al. Neurology Feb (1 of 2) 2006;66:339-343). The volume of myelinated white matter was measured in language-related temporal and frontal regions and in the central sensorimotor region. A spurt in vocabulary coincided with the end of a rapid myelination stage in language areas at 18 to 24 months.

## SEIZURE DISORDERS

## LONG-TERM OUTCOME OF CHILDHOOD-ONSET EPILEPSY

A prospective, long-term population-based study was conducted to determine the evolution of drug resistance and remission in 144 patients with childhood-onset epilepsy followed at University of Turku, Finland, and Epilepsy Research Group, Berlin, Germany. At the end of 37-year follow-up (range 11-42 years) since their first seizure before age 16 years, 67% were in terminal remission, on or off antiepileptic drugs. Remission was early, within the first year of treatment in 31% of patients; it was late, with a mean delay of 9 years in 50%. The course was remitting-relapsing before achieving terminal remission in 19%. Twenty seven (19%) patients were drug resistant from onset and never entered 5-year remission during follow-up. The etiology of the epilepsy syndrome was important in outcome. Symptomatic, localization-related and generalized epilepsies were more often drug resistant than idiopathic epilepsies, either generalized or focal. (Sillanpaa M, Schmidt D. Natural history of treated childhood-onset epilepsy: prospective, long-term population-based study. **Brain** March 2006;129:617-624). (Respond: Prof Dr Dieter Schmidt, Epilepsy Research Group, Goethestrasse 5, D-14163 Berlin, Germany).

COMMENT. The study finds that initial success or failure to achieve remission is not a reliable indicator of long-term outcome of childhood-onset epilepsy. Remission, defined as a seizure-free period of 5 or more consecutive years, is achieved by the end of a long followup period in 50% of patients without relapse, and in 20% after relapse. One-third has a poor outcome, with persistent seizures after a remission or without any remission period.

## QUALITY OF LIFE FOLLOWING EPILEPSY SURGERY

A prospective study of the families of 35 children with intractable epilepsy who underwent epilepsy surgery at Sydney Children's Hospital, NSW, Australia, found that those who were seizure-free had a greater improvement in the quality of life (QOL) than children with persistent seizures. The overall QOL questionnaire and subscales assessing cognitive, social, emotional, behavioral, and physical status, completed preoperatively and at 6 to 18 months after surgery, show significant improvement. (Sabaz M, Lawson JA, Cairns DR, et al. The impact of epilepsy surgery on quality of life in children. **Neurology** Feb (2 of 2) 2006;66:557-561). (Reprints: Dr Annie Bye, Department of Neurology, Sydney Children's Hospital, High Street, Randwick, NSW, 2031, Australia).

COMMENT. Epilepsy surgery improves QOL in children with seizures controlled.