VALUE OF SPECT IN INTRACTABLE EPILEPSY

The role of SPECT in 65 children undergoing video-EEG telemetry for intractable seizures was evaluated at Sydney Children's Hospital, New South Wales, Australia. Patients with a well-localized epilepsy syndrome and lesion on MRI had the highest concordance with SPECT (86% in the temporal group and 58% in the extratemporal group). In those not localized by MRI, SPECT provided localizing data in more than 50%. Ictal SPECT was of no greater prognostic value before surgery in 23 patients studied with a localized MRI lesion, but it provided additional localization of practical value in patients without lesions. Localization of SPECT to the surgical site was not predictive of surgical outcome. SISCOM confirmed conventional SPECT analysis in 19 of 25 cases, and localized lesions in 4 children in whom SPECT had failed. (Lawson JA, O'Brien TJ, Bleasel AF et al. Evaluation of SPECT in the assessment and treatment of intractable childhood epilepsy. <u>Neurology</u> November (1 of 2) 2000;55:1391-1393). (Reprints: Dr AME Bye, Department of Paediatric Neurology, Sydney Children's Hospital, Randwick, 2031, New South Wales, Australia).

COMMENT. SPECT may be of value in presurgical localization of lesions in children with a normal MRI or nonlocalized epilepsy syndrome.

SPECT and infantile spasms. Focal temporal lobe hypoperfusion is demonstrated on SPECT in infants with spasms, despite normal MRI (Miyazaki M et al. 1994). This series and others using PET are reviewed fully in <u>Progress in</u> <u>Pediatric Neurology III</u>, 1997;pp39-41.

ANTIEPILEPTIC DRUG WITHDRAWAL IN PARTIAL EPILEPSY

The optimal time of discontinuing anticonvulsant treatment in children with cryptogenic partial epilepsy was evaluated at the Universities of Chieti and Siena, Italy. In two groups of 45 and 44 children whose therapy was discontinued slowly (over a 6 month period) after 1 and 2 years from the last seizure, recurrence rates after 5 years follow-up were 29% and 25%, respectively. A 1 year seizure-free period is a safe interval for discontinuation of therapy in children with cryptogenic partial seizures. (Verrotti A, Morresi S, Basciani F et al. Discontinuation of anticonvulsant therapy in children with partial epilepsy. <u>Neurology</u> Nov (1 of 2) 2000;55:1393-1395). (Reprints: Dr Alberto Verrotti, Department of Medicine, Section of Pediatrics, University of Chieti, Opsdale Policlinico, Via dei Vestini 5, 66013 Chieti, Italy).

COMMENT. Therapy may be discontinued gradually after a 1 year seizurefree period in children treated for cryptogenic partial seizures. A relapse rate of approximately 25% is not significantly lower if treatment is continued for 2 years.

TERATOGENIC POTENTIAL OF ANTIEPILEPTIC DRUGS

The effect of antiepileptic drugs on intrauterine growth is reviewed from the Center for Human Molecular Genetics, Nebraska, and the University of Newcastle upon Tyne, UK. The differentiation of drug effects from those of the genotype of the exposed infant is important in the phenotypic expression of any dysmorphism. In a large Swedish study of 963 infants, with data collected prospectively over 3 periods, from 1973 to 1997, carbamazepine had the greatest negative effect on fetal body growth, although the degree was minor.

In a cohort of 400 women with epilepsy studied prospectively in Northern England, fetal malformations in 5% were significantly more common than among