

syndrome, should be reason to withhold treatment when seizures are infrequent. It is noteworthy that phenytoin and clobazam treatment of BECT was successful and unattended by seizure exacerbation and language deterioration.

SUDDEN DEATH IN EPILEPSY AND OCCULT CARDIAC DISEASE

Pathological evaluations of the hearts of 7 patients with epilepsy, aged 12 to 44 years, who died suddenly are reported from the Department of Neurosciences, New Jersey Medical School, Newark. Cardiac abnormalities were found in 5 epilepsy patients and in none of the hearts of a comparison non-epileptic group. Lesions were subendocardial, mainly irreversible perivascular and interstitial fibrosis, and reversible myocyte vacuolization. Seizures had been generalized and not more than 1 per month in the year prior to death. No patient had status epilepticus. Only 2 had therapeutic levels of AEDs at postmortem. Asphyxia was not the cause of death, and only 1 had neuropathological findings, a communicating hydrocephalus. Cardiac pathology was attributed to recurrent seizures and resulting coronary vasospasm with ischemia. (Natelson BH, Suarez RV, Terrence CF, Turizo R. Patients with epilepsy who die suddenly have cardiac disease. Arch Neurol June 1998;55:857-860). (Reprints: Benjamin H Natelson MD, Department of Neurosciences, New Jersey Medical School, 88 Ross St, East Orange, NJ 07018).

COMMENT. Patients with epilepsy who die suddenly without apparent cause are likely to have a cardiac abnormality, causally related to prior recurrent seizures and vasospasm. Risk factors for sudden death in epilepsy include young age, especially African-American, ambulatory, a long history of infrequent seizures, predominantly generalized tonic-clonic, and subtherapeutic levels of AEDs.

Adolescents with a first tonic-clonic seizure and a normal EEG are candidates for a cardiac consultation and work-up to exclude a primary cardiac arrhythmia, especially those involved in sports activities. The above study indicates that young patients with epilepsy may also require cardiac supervision to monitor possible coronary ischemic complications related to recurrent seizure activity. The necessity to maintain adequate AED levels in young, ambulatory and especially sports-orientated epilepsy patients is emphasized by these findings.

LEARNING DISORDERS

MEDIAL TEMPORAL LOBE ACTIVATION IN LEARNING

Regional cerebral blood flow was examined by PET recordings during multiple-trial learning in healthy volunteers tested at Guy's and St Thomas's Hospitals and the MRC Cyclotron Unit, Hammersmith Hospital, London. Eight adult subjects were presented visually with a 15-word list, either novel or repeated. Incremental learning occurred with repeated word lists and was associated with PET activation in the left medial temporal area, but not the left frontal. The left medial temporal region is activated by novel word visual stimuli and also in incremental and consolidating learning of repeated stimuli. The right frontal and precuneal regions, participating in retrieval of already learned memories, are also involved in this activation. Memory function requiring effort and elaboration of stimuli involves the left frontal region. (Kopelman MD, Stevens TG, Foli S, Grasby P. PET activation of the medial temporal lobe in learning. Brain May 1998;121:875-887). (Respond: Dr Michael Kopelman, Division of Psychiatry and Psychology, UMDS-St Thomas's Hospital, London SE1 7EH, UK).