

PEDIATRIC NEUROLOGY BRIEFS

A MONTHLY JOURNAL REVIEW

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Vol. 9, No. 1

January 1995

SEIZURE DISORDERS

SUDDEN UNEXPLAINED DEATH IN TREATED EPILEPSY

The overall incidence of sudden unexplained death in persons with epilepsy (SUDEP) was measured, and subgroups with a high risk of SUDEP were identified among a cohort of 6,044 persons aged 15-49 years listed in the Saskatchewan Health prescription drug file. The file contained all outpatient drug prescriptions since 1976. Anyone who had filled four or more prescriptions for antiepileptic drugs (AEDs) between 1976 and 1987 was included in the cohort analysed. Subjects with cancer or heart problems and those without epilepsy were excluded. For 153 of 163 deaths occurring in the final cohort of 3,688 subjects, copies of death certificates and autopsy reports of potential SUDEP cases were examined. There were 18 definite/probable SUDs and 21 possible SUDEPs, with an incidence of 0.54 to 1.35 SUDEP per 1,000 person-years. SUDEP incidence was highest in males with a history of treatment with three or more AEDs and four or more psychotropic drug prescriptions. A 1.7-fold increase in risk of SUDEP occurred for each increment in maximum number of AEDs. (Tennis P, Cole TB, Annegers JF, Leestma JE, McNutt M, Rajput A. Cohort study of incidence of sudden unexplained death in persons with seizure disorder treated with antiepileptic drugs in Saskatchewan, Canada. *Epilepsia* January 1995;36:29-36). (Reprints: Dr P Tennis, ESP Division, Burroughs Wellcome Co, 3030 Cornwallis Rd, Research Triangle Park, NC 27709).

COMMENT. Male sex, multiple AEDs, and use of psychotropic drugs are risk factors for SUD in persons with epilepsy. Severity and persistence of seizures are major risk factors. Some patients with potential cardiac causes, which can be important in the adolescent age group, were excluded from this study. Among the causes of death listed on the death certificates, cardiac related episodes accounted for six (12%), drowning occurred in 5, and aspiration in 7. A careful cardiac evaluation is recommended in young males with seizures of undetermined origin and a normal EEG, especially when a response to antiepileptic drugs is lacking.

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