

behavior problems. The author's emphasize the relative frequency of psychopathology in Tourette syndrome and the need for a comprehensive approach to this syndrome. (Singer H S, Rosenberg L A. Development of behavioral and emotional problems in Tourette syndrome. Pediatr Neuro Jan-Feb 1989; 5:41-44).

COMMENT. The demonstration in this study that there is a relationship between age and psychopathology in Tourette syndrome differs from a previous study which failed to reveal a relationship to age. Behavior and emotional problems were greater in the adolescent. In previous studies, the severity of motor and phonic tics have been claimed to be a predictor of behavioral disturbances in Tourette syndrome. This study corroborates previous reports and the original description by Gilles de la Tourette (1885) describing obsessive compulsive behavior as common in Tourette syndrome. Further studies are required to define the effect of attention deficit disorder with hyperactivity on the development of psychopathology in Tourette syndrome children.

#### BEHAVIORAL EFFECTS OF ANTIPILEPTIC DRUGS

Parental responses to a Child Behavior Checklist were compared before and after changing antiepileptic therapy in an open, parallel design study in the School of Pharmacy and Departments of Neurology and Pediatrics, School of Medicine, University of North Carolina, Chapel Hill, North Carolina. Patients were evaluated just before and again three to four months after starting or stopping phenytoin (PHT), carbamazepine (CBZ), phenobarbital (PB), or primidone (PMD). Patients 4-16 years of age whose antiepileptic regimens were being altered by either adding or discontinuing one of the four drugs were included. Behavior types were in two groups: 1) Externalizing (aggressive and hyperactive), and 2) Internalizing (depressed, withdrawn, schizoid, somatic complaints). Individual T scores were calculated and compared with and without treatment using the two tailed t test for paired data. In the CBZ group (n=6), there were significant improvements in aggression, in the externalizing broad band group and in the T behavior score. Significant changes did not occur in the PHT (n=6) or in the PB/PMD (n=7) groups: externalizing behavior was worse in certain individuals receiving PB or PMD. The Child Behavior Checklist was a sensitive instrument for assessing the behavioral effects of antiepileptic agents in epileptic children. Carbamazepine appeared to have a more consistent beneficial effect on child behavior than phenytoin, phenobarbital, and primidone. (Miles M V et al. Assessment of antiepileptic drug effects on child behavior using the Child Behavior Checklist. J Epilepsy December 1988; 1:209-213).

COMMENT. The Child Behavior Checklist (CBCL) consists of 112 behavior problem items to which a parent responds: very (or often) true, somewhat (or sometimes) true, or not true, as a description of their child. The CBCL has been standardized for both sex and age. The CBCL can be completed by the parents in 15-20 minutes and may be computer scored allowing for rapid individual and group evaluation. This study confirms the value of the CBCL in detecting behavioral changes secondary to antiepileptic therapy in children. All antiepileptic drugs may adversely affect child behavior and cognition but carbamazepine seems to be least likely to increase behavioral problems.