neurological outcome. <u>Acta Paediatr</u> June 1996;84:739-46). (Respond: Dr S Koch, Rehabitationszentrum fur Kinder, Dorfstr 16, 14476 Kartzow, Germany).

COMMENT. The authors suggest that the neonatal VPA-induced malformations and neurobehavioral and late neurological side effects may be related to unexpectedly high levels of the drug and its active metabolites during pregnancy, at birth, and in the neonatal period. Mothers taking VPA during pregnancy should have drug levels closely monitored, especially at the time and shortly after conception but also throughout pregnancy.

AED/ORAL CONTRACEPTIVE INTERACTIONS

A national survey to determine obstetricians' and neurologists' awareness of oral contraceptive (OC) and antiepileptic drug (AED) interactions and the risk of birth defects in infants of AED-treated women with epilepsy was conducted by mailed questionnaire at the Departments of Neurology and Psychiatry, Johns Hopkins University, Baltimore, MD, Responses were received from 160 (16%) neurologists and 147 (15%) obstetricians in 47 states. Most neurologists (80%) knew that phenytoin, carbamazepine, and phenobarbital interfered with OCs, but only 38% knew that valproic acid does not interfere with OCs. Most obstetricians knew that phenytoin interfered with OCs (77%), but fewer were aware of interactions with other AEDs and only 29% knew that valproic acid was non-reactive. Both specialties were generally ignorant of the effects on OCs of ethosuximide, gabapentin, and felbamate. OC failure and accidental pregnancies in patients taking AEDs were reported by 27% of neurologists and 21% of obstetricians. Fewer than half of neurologists (41%) and obstetricians (41%) had their patients adjust OC doses when taking AEDs. Neurologists (44%) often underestimated the risk for AED-induced birth defects (actual risk 4-6%), whereas the risk estimate for most obstetricians varied from 1 to 10%. Some respondents guessed the risk was 50%. Only 3% of neurologists and 5% of obstetricians counselled women taking AEDs to avoid pregnancy. (Krauss GL et al. Antiepileptic medication and oral contraceptive interactions: a national survey of neurologists and obstetricians. Neurology June 1996;46:1534-1539), (Reprints: Dr Gregory L Krauss, Johns Hopkins Hospital, Meyer 2-147, 600 N Wolfe Street, Baltimore, MD 21287).

COMMENT. The authors conclude that many women in the US suffering from epilepsy are at risk for unplanned pregnancies because their physicians are not sufficiently aware of the interactions of antiepileptic drugs and oral contraceptives. They admit that the survey may have overestimated the lack of physician awareness of AED/OC interactions because of the small number of respondents and a possible response bias. Enzyme-inducing AEDs, including carbamazepine, phenytoin, phenobarbital, primidone, and ethosuximide, decrease the effectiveness of OCs by increasing metabolism of synthetic estrogens and lowering synthetic sex hormone levels. Valproic acid, gabapentin, and vigabatrin do not induce hepatic metabolism and are unlikely to interfere with Ocs. Valproic acid has not been asociated with accidental pregnancies when administered as monotherapy. Irregular or breakthrough menstrual bleeding was used as a sign to increase OC doses in women taking enzyme-inducing AEDs.