

Tel Aviv Sourasky Medical Center. Responding 36/55 (65%) neurologists and 66/112 (59%) neonatologists chose similar antiepileptic drugs as first line (phenobarbital), second line (phenytoin), and third line (benzodiazepines) treatments. Treatment duration favored by both specialties varied widely from 1-52 weeks, neurologists tending to recommend longer treatment for seizures secondary to asphyxia or hemorrhage. For intractable neonatal seizures, neurologists favored valproic acid and topiramate, and neonatologists recommended lidocaine and benzodiazepines ($P=0.0023$). Continuous EEG monitoring after asphyxia was used by 70.5% of neonatologists contrasting with only 40% of neurologists ($P=0.013$). Specialties differed concerning the harmfulness of neonatal seizures: 76% neurologists cf 55% neonatologists answered "Yes" to "Could neonatal seizures harm the brain?" ($P=0.065$); 12% neurologists cf 34% neonatologists answered "Don't know." "Could electrographic seizures harm the brain?;" 43% neurologists and 47% neonatologists answered "Don't know." "Would you treat electrographic seizures?;" 40% neurologists and 38% neonatologists answered "Yes." Controlled clinical trials to establish evidence-based guidelines for the management of neonatal seizures are indicated. (Bassan H, Bental Y, Shany E et al. Neonatal seizures: dilemmas in workup and management. *Pediatr Neurol* June 2008;38:415-421). (Dr Haim Bassan, Neonatal Neurology Service, Dana Children's Hospital, Tel Aviv Sourasky Medical Center, 6 Weizmann Dr, Tel Aviv 64239, Israel. E-mail: bassan@post.tau.ac.il).

COMMENT. Israeli neurologists and neonatologists agree on initial management, but differ on treatment of intractable neonatal seizures, the harmfulness of neonatal seizures on developing brain, and need to monitor subclinical seizure activity. "Don't know" was a frequent answer by both specialties to questions regarding harmfulness of electrographic seizures and the need to treat them. Controversies in the literature need further research and answers.

Lamotrigine for partial seizures in patients aged 1 to 24 months was well tolerated and may be effective as adjunctive therapy, as shown by a randomized, double-blind, placebo-controlled study in 19 patients at Vanderbilt University, Nashville, TN (Pina-Garza, Levisohn P, Gucuyener K, et al. *Neurology* May 27, 2008;70:2099-2108). Rash occurred in 15% during the open label phase; none was Stevens-Johnson syndrome or toxic epidermal necrolysis. Children <2 years of age are considered therapeutic orphans since antiepileptic drug trials are hampered by multiple restrictions. This study demonstrates that drug trials at this age can be completed. (Goodkin HP, Buck ML. Editorial. *Neurology* 2008;70:2093-2094).

INFECTIOUS DISORDERS

MATERNAL INFECTION AND RISK OF EPILEPSY IN CHILDHOOD

The association between prenatal exposure to maternal specific infections during pregnancy and the subsequent risk of epilepsy in childhood was estimated in a prospective population-based birth cohort in Denmark followed for 8 years at University of Aarhus, Denmark. Of 90619 singletons, 646 children were identified with a diagnosis of epilepsy in the follow-up period. Children exposed to maternal cystitis in each trimester, pyelonephritis,

diarrhea lasting >4 days in the first 2 trimesters, coughs, and/or vaginal yeast infection in prenatal life had an increased risk of epilepsy. Cough lasting >1 week was a risk factor only in the first year of life, and vaginal yeast infection only in children born preterm. Genital herpes, venereal warts, and herpes labialis were not risk factors. These associations were not changed in children with cerebral palsy (0.2%), congenital malformation (7.2%), or low Apgar (<7) at 5 minutes (1.8%). (Sun Y, Vestergaard M, Christensen J, Nahmias AJ, Olsen J. Prenatal exposure to maternal infections and epilepsy in childhood: a population-based cohort study. **Pediatrics** May 2008;121:e1100-e1107). (Respond: Yuelian Sun MD, Department of Epidemiology, University of Aarhus, Vennelyst Blvd 6, Aarhus, 8000 C, Denmark. E-mail: ys@soci.au.dk).

COMMENT. Some maternal infections are associated with an increased risk of epilepsy during childhood. The mechanisms underlying the associations are unknown, but fever and cytokines are possible factors. (Adinolfi M. **Dev Med Child Neurol** 1993;35:549-553; Dammann O, Leviton A. **Pediatr Res** 1997;42:1-8).

CONGENITAL CYTOMEGALOVIRUS INFECTION AND RISK OF EPILEPSY

The clinical, laboratory and neuroradiological findings in 19 children with congenital cytomegalovirus (CMV) infection were retrospectively reviewed for features of epilepsy in 7 (37%), in a study at Osaka Medical Center, Japan. Partial seizures occurred in 5 at a mean age of 20 months (range 2-37 months), West syndrome occurred in 3 patients. Seizures were uncontrolled at time of last follow-up (mean 96 months) in 6 patients. Neonatal clinical features (gestational age, gender, birth asphyxia, microcephaly, chorioretinitis, neonatal seizure) were not predictive of development of epilepsy with CMV, whereas imaging abnormalities (ventricular dilatation and migration disorder) were risk factors. (Suzuki Y, Toribe Y, Mogami Y, Yanagihara K, Nishikawa M. Epilepsy in patients with congenital cytomegalovirus infection. **Brain & Dev** June 2008;30:420-424). (Respond: Dr Yasuhiro Suzuki. E-mail: yasuzuki@mch.pref.osaka.jp).

COMMENT. Neuroradiographic findings, rather than clinical symptoms at birth, are most predictive of development of epilepsy in children with CMV infection. West syndrome in 43% of 7 patients in this series is a lower prevalence for this seizure type than expected.

HERPES SIMPLEX VIRUS TYPE 2 NEUROLOGIC COMPLICATIONS

The neurologic complications of HSV-2 infection are reviewed by researchers at University of Kentucky College of Medicine, Lexington. HSV-2-associated neurologic disease results from primary infection or reactivation of latent HSV-2. Primary infection occurs in neonates but is usually delayed until adolescence and adulthood, following sexual activity. HSV-2 latency and reactivation is centered in sacral ganglia, but may also be widespread in the CNS. Approximately 90% of infections are unrecognized. Neurological complications of HSV-2 infection involve any part of the neuraxis. Encephalitis (HSE) is the most frequent manifestation of HSV-2 in neonates, and onset is heralded by focal or generalized seizures. CSF shows a lymphocytic pleocytosis, increased protein, and PCR