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 asphxia, 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

positive for HSV-2. Compared to HSV-1 infection, HSV-2 encephalitis has a higher frequency of seizures, greater pleocytosis and protein level in CSF, and more severe structural brain damage on imaging. Other neurological complications of HSV-2 infection occur mainly in adults and include acute aseptic meningitis, recurrent aseptic meningitis (sometimes called Mollaret meningitis), ascending myelitis, lumbosacral radiculopathy, cranial neuropathy (Bell palsy), and acute retinal necrosis. HSV-2 CNS complications appear early in the course of HIV/AIDS. Diagnosis of HSV infection of the nervous system is made by PCR assays of CSF. Viral culture and serological assays for HSV antibodies may also be useful. Acyclovir is standard therapy. (Berger JR, Houff S. Neurological complications of herpes simplex virus type 2 infection. **Arch Neurol** May 2008;65:596-600). (Respond: Joseph R Berger MD, Department of Neurology, University of Kentucky College of Medicine, Kentucky Clinic Room L-445, 740 S Limestone St, Lexington, KY 40536. E-Mail: jrbneuro@uky.edu).

COMMENT. American Academy of Pediatrics Red Book (27th ed, 2006) finds that one third of cases of HSV infection in the neonate involve the CNS. CNS disease usually manifests between the second and third weeks of life. HSV-2 is the most common cause of disease in neonates, and accounts for 75% of cases.

SEIZURE DISORDERS

MRI ABNORMALITIES AND FIRST FEBRILE SEIZURES

The frequency of MRI-detected brain abnormalities with first febrile seizures (FS) and their association with FS type and with specific features of complex FS were determined in a prospective study at the Pediatric Emergency Department of New York-Presbyterian Children's Hospital, Columbia University, New York. MRI performed within 1 week of the first FS showed abnormalities in 12.6% of 159 children affected. The number and ratio of simple to complex FS was 105:54 or 2:1. Imaging abnormalities occurred in 11.4% with simple FS and 14.8% of complex FS (n.s.). Of 54 complex FS cases, those with both focal and prolonged FS (N=14, 26%) were more likely to have MRI abnormalities than simple FS cases. These included focal cortical dysplasia and gray matter heterotopia (known to be associated with seizures) and subcortical focal hyperintensities (=/> 5 mm) and delayed myelination (not typically associated with seizures). Focal hyperintensities, the most common abnormality with first FS, were more frequent in children with complex (N=7, 13%) compared to simple FS (N=1, 0.9%, p=0.001). In comparison, the NIH Study of Normal Brain Development found no brain abnormalities on baseline MRI scans. Brain abnormalities may be associated with a lower seizure threshold in febrile children, predisposing to the development of FS. The findings did not affect our clinical management of FS, and MRI is unnecessary in FS, without some other neurological indication. (Hesdorffer DC, Chan S, Tian H, et al. Are MRI-detected brain abnormalities associated with febrile seizure type? **Epilepsia** May 2008;49:765-771). (Respond: Dale C Hesdorffer PhD, GH Sergievsky Center, Columbia University, P & S Unit 16, 630 West 168th Street, New York, NY 10032. E-mail: dch5@columbia.edu).