

SE in a study in the UK (Matthes JWA, Wallace SJ. **Dev Med Child Neurol** 1995;37:226-231).

The risk of SE in children with an initial diagnosis of epilepsy is 9.5%, according to a prospective community-based cohort study of 613 children in New York (Berg AT et al. **Neurology** 2004;63:1027-1034). The risk is increased in children with a previous history of SE, in younger age groups, and in those with symptomatic etiology. The risk was 14% in symptomatic cases and 2.6% in the idiopathic group. The authors agree with the UK practice, recommending abortive therapy (rectal diazepam) in the home for patients at high risk of SE. The importance of seizure prevention and early abortive therapy is stressed, especially in symptomatic epilepsies. A clear predetermined plan of action, prompt administration of appropriate AEDs in adequate doses, and attention to apnea, hypoventilation, fever and infection, or metabolic abnormalities are outlined by the Epilepsy Foundation of America's working group on SE (Dodson WE et al. **JAMA** 1993;270:854-859).

## **INFECTIOUS DISORDERS**

### **PCR IN DIAGNOSIS OF LYME NEUROBORRELIOSIS**

A prospective study of 57 hospitalized patients with active neuroborreliosis (NB) and proved CSF antibodies was conducted using PCR for the detection of specific DNA in plasma, CSF and urine, at Faculty Hospital Bulovka; Charles University, Prague; and Hospital Nymburk, Czech Republic. Bannwarth's syndrome (lymphocytic meningoradiculitis) was present in 29 patients, acute meningoencephalitis in 5, subacute encephalitis in 3, meningitis in 6, polyneuritis in 9, and facial palsy in 5. Neurological abnormalities were mild in 25 (44%), moderate in 17 (30%), and severe in 15 (26%). Symptoms improved with antibiotic treatment in 84%, and the remainder improved after 3 months, with no relapses.

Before treatment, 36 (63.1%) patients tested PCR positive in all parallel specimens, 28 (49.1%) were positive in urine, 20 (35%) in CSF, and 16 (28%) in plasma. Immediately after treatment, 17 (30%) were positive in urine, 8 (14%) after 3 months, and 1 persisted positive after 6 months. The highest sensitivity of PCR was found in urine, and the lowest in plasma. The results support the use of PCR in the diagnosis of NB. (Picha D, Moravcova L, Zdarsky E et al. PCR in lyme neuroborreliosis: a prospective study. **Acta Neurol Scand** November 2005;112:287-292). (Respond: Dusan Picha PhD, First Clinic for Infectious Diseases, Faculty Hospital Bulovka, 180 81 Prague, Czech Republic).

COMMENT. PCR testing for spirochetal DNA in urine or CSF, using appropriate primers, is a useful diagnostic tool in patients suspected of neuroborreliosis (NB).

Assessment of serum antibodies to a panel of Borrelia-specific antigens is of value in the laboratory diagnosis of NB at presentation of symptoms (Heikkila T et al. New antigens for serological diagnosis of neuroborreliosis in children. **Pediatr Inf Dis J** Aug 2005;24:709-712). In addition to CSF lymphocytic pleocytosis and CSF anti-flagella antibodies, all 7 patients with definite NB and 7 of 13 with probable NB had serum IgG antibodies to 2 of 3 novel antigens at presentation.