immediate after initiation of cEEG in 15%, within 1 hour in 50%, and within 24 hours in 80%. Patients with clinical seizures prior to cEEG had NCSz more frequently than those without (83% vs 17%). NCSz were most common in patients with periodic lateralized epileptiform discharges (PLEDS) [73%], absence of background reactivity on cEEG [65%], any periodic discharges [65%], and absence of sleep architecture [50%]. (Jette N, Claassen J, Emerson RG, Hirsch LJ. Frequency and predictors of nonconvulsive seizures during continuous electroencephalographic monitoring in critically ill children. Arch Neurol Dec 2006;63:1750-1755). (Respond: Nathalie Jette MD MSc, Foothills Medical Centre, Department of Clinical Neurosciences, 1403-29th St NW, Calgary, Alberta, Canada T2R 1R8).

COMMENT. Nonconvulsive seizures are common during cEEG in critically ill children, especially in those with clinical seizures before cEEG initiation. Patients with PLEDS should be monitored for at least 24 hours to exclude NCSz.

HEART RATE CHANGES OF LIMITED VALUE IN DETECTION OF NEONATAL SEIZURES

Heart rate changes were studied during 169 seizures in 14 neonates with severe birth asphyxia at the Erasmus MC-Sophia Children’s Hospital, Rotterdam, The Netherlands. Changes were detected during 21 seizures (12.4%) in 8 patients; heart rate was increased in 4, decreased in 1, and both patterns were observed in 3 patients. Diminished or absent beat-to-beat variability (“stable baseline HR”), recognized as a poor prognostic sign, was associated with a nonsignificant trend toward increased mortality. Heart rate monitoring is of limited sensitivity for detecting postasphyxial neonatal seizures. (Cherian PJ, Blok JH, Swarte RM, Govaert P, Visser GH. Heart rate changes are insensitive for detecting postasphyxial seizures in neonates. Neurology Dec 2006;67:2221-2223). (Reprints: Dr PJ Cherian, Erasmus MC, Department of Clinical Neurophysiology, University Medical Center, Dr Molewaterplein 40, 3015 GD Rotterdam, The Netherlands).

COMMENT. Heart rate changes during seizures involve connections between the cerebral hemispheres and brain stem autonomic regulatory centers. Unlike adults with ictal heart rate and blood pressure changes, of value in differentiating pseudo- from epileptic seizures (Opherk C et al. Neurology 2002;58:636-638; Laroia N. Neurology 2006;67:2101), the connections that govern autonomic dysregulation are insensitive in the neonate with postasphyxial seizures.

ATTENTION DEFICIT AND COGNITIVE DISORDERS

EFFECT OF ROLANDIC SPIKES ON ADHD IMPULSIVE BEHAVIOR

The association of Rolandic spikes with the neuropsychological profile of children with attention deficit hyperactivity disorder (ADHD) was studied in a total of 48 patients at JW Goethe-University, Frankfurt/Main; and Central Institute of Mental Health, Mannheim, Germany. Sixteen children with ADHD and Rolandic spikes (RS) were compared with 16