NEONATAL DISORDERS

RISK ASSESSMENT OF NEONATES BY NEUROLOGIC EXAM AND AMPLITUDE-INTEGRATED ELECTROENCEPHALOGRAPHY

The value of an early neurologic examination and amplitude-integrated electroencephalography (a-EEG) in the early identification of term infants at risk for persistent encephalopathy was evaluated in 52 infants enrolled prospectively with evidence of intrapartum distress at the University of Texas Southwestern Medical Center, Dallas, TX. Infants with Apgar scores <5 at 5 min or cord arterial pH <7.00, who were admitted to intensive care, had a neurologic exam at 5 +/- 3 hours after delivery, using a modified Sarnat staging system (stages 2 and 3 are abnormal) and a blinded simultaneous a-EEG measurement using a cerebral function monitor. An abnormal short-term outcome, defined as persistent moderate to severe encephalopathy beyond 5 days, was present in 14 (28%) of 50 infants. Nine (53%) of 17 infants with stage 2 encephalopathy and both infants with stage 3 had a short-term abnormal outcome. The a-EEG was abnormal in 15 (30%) infants, 11 (73%) having an abnormal outcome. A combination of abnormal neurologic exam and abnormal a-EEG had the highest specificity (94%) and positive predictive value (85%). (Shalak LF, Laptook AR, Sithembiso C et al. Amplitude-integrated electroencephalography coupled with an early neurologic examination enhances prediction of term infants at risk for persistent encephalopathy. Pediatrics February 2003;111:351-357. (Reprints: Jeffrey M Perlman MD, Department of Pediatrics, University of Texas Southwestern Medical Center, 5323 Harry Hines Blvd, Dallas, TX 75390).

COMMENT. A combination of neurologic exam and a-EEG shortly after birth provides the best prediction of high-risk for abnormal outcome and persistent encephalopathy. Both evaluations can be performed by clinicians at the bedside.

HEADACHE DISORDERS

PROGNOSIS OF ADOLESCENT MIGRAINE HEADACHE

The prevalence and evolution over 5 years of migraine without aura (MWOA) and migrainous disorder (MD) in 64 adolescent patients (34 girls and 30 boys, mean age 17.3 +/-1.1 years) were studied at the Institute of Neuropsychiatry, University of Palermo, Italy. Thirty two (50%) had MWOA, 18 (28.1%) had MD, and 14 (21.9%) had headache not classifiable (HnC). MWOA persisted in 56.2%, converted to MD or HnC in 9.4% and 3.1% cases, respectively, changed to episodic tension-type headache (ETTH) in 12.5%, and remitted in 18.8%. MD persisted in 11.1%, converted to MWOA or HnC in 27.8% and 5.5% cases, respectively, changed to ETTH in 11.1%, and remitted in 44.5%. Analgesic drug-use was greater in patients with MWOA than MD (80% cf 37.5%, p=.02). (Camarda R, Monastero R, Santangelo G et al. Migraine headaches in adolescents: a five-year follow-up study. Headache 2002;42:1000-1005. (Respond: Prof R Camarda, Institute of Neuropsychiatry, University of Palermo, Via La Loggia 1, 90129, Palermo, Italy.)