
SUBCLINICAL POSTTRAUMATIC SEIZURES DETECTED BY CONTINUOUS VIDEO-EEG MONITORING

Investigators at Mattel Children’s Hospital, UCLA, and University of Colorado, used continuous video-EEG monitoring (cEEG) to study the incidence and risk factors for subclinical early posttraumatic seizures (EPTS) in 87 consecutive, unselected (mild – severe), acute traumatic brain injury (TBI) patients requiring admission to the PICU. Thirty-seven (42.5%) had seizures: subclinical in 16.1% (only subclinical in 6.9%), status epilepticus (SE) in 18.4%, and subclinical SE in 13.8%. Risk factors for subclinical seizures and SE included younger age, abusive head trauma, and intraaxial bleed. SE and subclinical SE were associated with increased hospital length of stay. cEEG monitoring significantly improves detection of seizures and is the only way to detect subclinical seizures (SE). (Arndt DH, Lerner JT, Matsumoto JH, et al. Subclinical early posttraumatic seizures detected by continuous EEG monitoring in a consecutive pediatric cohort. Epilepsia 2013 Oct;54(10):1780-8). (Response: Jason T Lerner, 10833 Le Conte, 22-474 MDCC, Los Angeles, CA 90095. E-mail: jlerner@mednet.ucla.edu).

COMMENT. Continuous EEG monitoring is recommended in young children with TBI, particularly in those with abusive head trauma and in those with intraaxial blood on CT. Rapid detection and treatment of EPTS may be of benefit in the immediate management of patients with TBI, but control of subclinical EPTS may not prevent occurrence of late posttraumatic epilepsy nor reflect long-term adverse effects of AEDs on the developing brain.

PROGNOSIS OF EPILEPSY

Investigators from the Institute of Neurology, Queen Square, London, UK, report results of longitudinal cohort studies of prognosis in epilepsy in adults and children and focus particularly on the National General Practice Study of Epilepsy (NGPSE) in 1195 patients initiated in 1983. Other longitudinal studies include the Mayo Clinic Record Linkage Study, the Tonbridge Study and the Study from Turku, confined to children and initiated in the 1970s. The findings are summarized as follows: 1) Epilepsy prognosis is frequently good, 65-85% cases entering long-term remission; 2) prognosis is better in newly diagnosed cases than in patients with chronic epilepsy; 3) early response to treatment is usually an indication of a good long-term prognosis; 4) the longer the remission, the less likely a subsequent recurrence; 5) the longer seizures recur, the poorer the long-term outlook; 6) delaying treatment, even for many years, does not worsen long-term prognosis; 7) continuous and burst patterns are more common than intermittent seizure patterns; 8) mortality may occur at any time in the course of epilepsy but is highest in the early years after diagnosis and is largely due to the underlying cause; 9) febrile seizure prognosis is generally good with ~6-7% developing late epilepsy (rate of