

ADHD children without epileptiform EEG discharges, and 16 healthy controls. The neuropsychological test battery focussed on attentional processing, cognitive efficiency, response inhibition, visuospatial and auditory-verbal short-term memory and language functioning. ADHD children with RS, compared to ADHD without RS and controls, showed impairments in performance of a Continuous Performance Task, with more commission errors, indicating deficient inhibition of an ongoing response, and errors on the Stroop task, with deficient interference control, both pointing to an increased impulsivity (lack of response inhibition). (Holtmann M, Matei A, Hellmann U et al. Rolandic spikes increase impulsivity in ADHD – A neuropsychological pilot study. **Brain Dev** Nov 2006;28:633-640). (Respond: e-mail: holtmann@em.uni-frankfurt.de (M. Holtmann)).

COMMENT. This study demonstrates two forms of response inhibition in ADHD children with Rolandic spikes (RS) compared to ADHD children without RS and controls. These are deficient inhibition of an ongoing response, and deficient interference control, both deficits pointing to an increased impulsivity, or lack of response inhibition. These findings confirm previous reports of increased distractibility and impulsivity, and impaired inhibitory control in children with Rolandic spikes. (Yung AWY et al. **Ped Neurol** 2000;23:391-395).

SPECTRUM OF IDIOPATHIC ROLANDIC EPILEPSY SYNDROMES AND BEHAVIORAL CORRELATES

The natural history of benign childhood epilepsy with centrotemporal spikes (BCECTS), BCECTS Plus syndromes, Rolandic epilepsy-related syndromes, and idiopathic benign childhood epilepsy with occipital spikes (Panayiotopoulos syndrome) is reviewed by researchers at Maggiore Hospital, Bologna, Italy. These syndromes constitute a group of age-dependent idiopathic epilepsy disorders with a characteristic EEG pattern and neuropsychological deficits related to ongoing paroxysmal activity. These syndromes forming a continuum or spectrum have a common underlying mechanism, modulated by the duration, localization, and age of onset of the spike-wave discharge. Some consider the syndromes to represent a type of “epileptic encephalopathy.” Continuous spike-waves during sleep syndrome (CSWS) is included as an epileptic encephalopathy, a condition in which the epileptiform abnormalities are believed to contribute to a global regression of cognitive function and behavior. The role of the genetic predisposition to BCECTS and related syndromes requires further elucidation. (Gobbi G, Boni A, Filippini M. The spectrum of idiopathic rolandic epilepsy syndromes and idiopathic occipital epilepsies: From the benign to the disabling. **Epilepsia** Nov 2006;47 (Suppl 2):62-66). (Respond: Dr Giuseppe Gobbi, e-mail: giuseppe.gobbi@ausl.bologna.it).

COMMENT. Recent studies have questioned the benign nature of BCECTS and related syndromes, and have stressed the associated neuropsychological and cognitive deficits. These include attention (ADHD), visual-motor coordination, dyspraxia, language and learning disabilities, mental impairment, and behavioral disorders, usually concomitant with activation of interictal EEG discharges. BCECTS occurs as 15% of childhood epilepsies, the most frequent epilepsy in school age children. The genetic predisposition is frequent with male predominance. Seizures and EEG discharges resolve before the age of puberty, but cognitive and behavioral deficits often persist.