

ATTENTION DEFICIT AND COMORBID DISORDERS

FREQUENCY OF ROLANDIC SPIKES IN ADHD

The frequency of rolandic spikes in nonepileptic children with attention deficit hyperactivity disorder (ADHD) was compared with a control group of normal school-aged children in a study at the University of Frankfurt, Germany. The EEGs of 483 ADHD outpatients between 2 and 16 years evaluated prospectively showed rolandic spikes in 27 (5.6%); (23 boys and 5 girls, mean age 7.9 years). Seizures during follow-up occurred in 1 (3.7%) of the 27 patients with ADHD plus rolandic spikes, and none of the 456 ADHD children without rolandic spikes. Sex ratio and global functioning were similar in ADHD patients with and without spikes. ADHD children with spikes presented earlier and exhibited more hyperactive-impulsive symptoms than those without spikes. ADHD-combined type was more common than ADHD inattentive type in children with rolandic spikes. One third of the patients in both groups had comorbid conduct or oppositional defiant disorder. (Holtmann M, Becker K, Kentner-Figura B, Schmidt MH. Increased frequency of rolandic spikes in ADHD children. *Epilepsia* 2003;44:1241-1244). (Reprints: Dr med M Holtmann, JW Goethe-University of Frankfurt/M, Department of Child and Adolescent Psychiatry, Deutschordenstrasse 50, D-60590 Frankfurt/M, Germany).

COMMENT. Approximately one in 20 children with ADHD have rolandic spikes in the EEG, and boys out number girls by 4:1. The authors recommend EEG recordings in ADHD patients with cognitive and behavioral problems, even without clinical seizures or family history of epilepsy. Stimulant therapy in conservative doses may be safe in children with ADHD and well-controlled epilepsy. Further study is required to determine if AED treatment is justified in ADHD patients with rolandic spikes but without seizures.

ADHD AND OPPOSITIONAL DEFIANT DISORDER

The outcome of 131 children with ADHD (101 males, 30 females; mean age 5 years, range 3 to 7 years) with and without oppositional defiant disorder (ODD) was determined in a prospective study at the University of Goteborg, Sweden. Full DSM-IV criteria for ODD were present in 60% of ADHD patients, and only 10 were free of all symptoms of ODD. ADHD combined subtype, males, and children of divorced parents and of mothers with low socioeconomic status were particularly at risk of ODD. ADHD patients with ODD showed more ADHD symptoms than those without ODD. (Kadesjo C, Hagglof B, Kadesjo B, Gillberg C. Attention-deficit-hyperactivity disorder with and without oppositional defiant disorder in 3- to 7-year-old children. *Dev Med Child Neurol* Oct 2003;45:693-699). (Respond: Cristopher Gillberg MD, PhD, Department of Child and Adolescent Psychiatry, Goteborg University, Kungsgatan 12, SE-411 19, Goteborg, Sweden).

COMMENT. The prevalence of association of ADHD and ODD indicates the importance of inclusion of work-up for both disorders in children presenting with either diagnosis.

Prevention of severe learning disability reviewed by O'Brien G (*Dev Med Child Neurol* Aug 2003;45(suppl 95):35-37) emphasizes the detection and early treatment of comorbid autism and ADHD.

AUTISTIC SPECTRUM DISORDER

DIAGNOSIS OF AUTISM

The identification and assessment process for children with autism and autistic spectrum disorder is reviewed by a developmental pediatrician, speech and language therapist, and consultant in pediatric disability at Guy's and St Thomas' Hospitals, and Great Ormond Street Children's Hospital, London, UK. Autism is a behaviorally defined, neurobiologic disorder and the endpoint of several organic etiologies that include: prenatal insults, metabolic and toxic disorders, tuberous sclerosis, and postnatal encephalitis. A specific medical cause is found in only 6-10% of cases, most often in those with learning problems. Epilepsy is a common complication. Genetic factors play a key role, twin studies showing a 60% concordance in monozygotic twins, but no specific candidate genes have been isolated. Most parents identify problems at about 18 months of age, and diagnosis may be made between 2 and 3 years of age. Screening tests can be unreliable. Children with Asperger's syndrome, or 'high functioning' autism, may not be recognized until they are exposed to greater social demands in a school environment. Prevalence of autism is approximately 5 to 6 per 1000 in younger children. The observed increase in the number diagnosed with autism is explained by the recognition of an autistic spectrum rather than a core condition, changes in diagnostic methods, and the inclusion of disorders complicated by autistic symptoms, eg ADHD, Tourette syndrome, and tuberous sclerosis.

In 25-30% of autistic children, regression of development begins between 15 and 21 months of age. Loss of word use, social withdrawal, loss of eye contact and play interests, unusual behaviors such as flapping are signs of regression. The differential diagnosis includes mental retardation and learning disability, language disorder (aphasias, Landau-Kleffner syndrome), incoordination (developmental coordination disorder), reactive attachment disorder (as in foreign adoptees), epilepsy, Rett syndrome, and neurodegenerative disorders. Prognosis depends on success of interventional therapy, such as cognitive behavior therapy, and social skills training. IQ, particularly verbal IQ, is a good predictor of future ability to succeed in later life. (Baird G, Cass H, Slonims V. Diagnosis of autism. *BMJ* 30 August 2003;327:488-493). (Respond: G Baird, Newcomen Centre, Guy's and St Thomas' NHS Trust, London SE1 9RT, UK).

COMMENT. "Autism is melting the edges of the pediatric interface between neurology and psychiatry as they become blended back into one medical discipline" – neuropsychiatry, according to Coleman M (Autism: known and unknown. *Dev Med Child Neurol* Aug 2003;45 (suppl 95):31-34). Autism is not one disease or spectrum but a syndrome and many different diseases. We need to know how and when the pathology is triggered in each subgroup leading to subsequent neurodevelopmental regression. Why is autism predominantly found in males (4:1 ratio)? How do we diagnose autism in the neonate, thus leading to prevention or early therapy?