

slowly progressive. MmD is autosomal recessive and CCD is autosomal dominant in inheritance. The above study of families provides genetic evidence that MmD is a variant of CCD with autosomal recessive inheritance and transitory expression as MmD.

Congenital myasthenic syndrome (CMS) caused by a newly identified chromosomal microdeletion and N-box mutation of the AChRe gene is reported from Ludwig-Maximilians-University, Munich, Germany. (Abicht A, Stucka R, Schmidt C et al. *Brain* May 2002;125:1005-1013). CMSs are a heterogeneous group of disorders with impaired neuromuscular transmission due to various inherited defects. This is the first report of a chromosomal microdeletion affecting an AChR gene in skeletal muscle.

Therapies for disorders of the neuromuscular junction are reviewed in an editorial (Pruitt JN II, Swift TR. *Arch Neurol* May 2002;59:739-742). These are of 2 types: 1) symptomatic treatment with cholinesterase inhibitors and plasmapheresis; and 2) immunotherapy (immunosuppressant medications), immunomodulating therapy (immunoglobulin (Ig) G), and thymectomy. The most promising approach is the development of more specific and less toxic immunosuppression therapies.

ATTENTION DEFICIT AND COMORBID DISORDERS

ATTENTION DYSFUNCTION AND SUBSTANCE ABUSE

The influence of adolescent attention functioning on the development of substance abuse was studied in 66 high-risk youths over an 8-year period at the University of California San Diego Department of Psychiatry. Substance involvement was assessed by self-report, resource person reports, and randomly sampled toxicology screens at interviews at ages 15 through 23. Lower scores on neuropsychological tests of attention/executive functioning at intake assessment were prospectively (8 years later) associated with greater frequency of substance use and marijuana use in particular. Youths who met one or more substance dependence criteria as adults had significantly poorer attention performance in adolescence. Gender, education, conduct disorder, family history of substance use disorders, and learning disabilities did not influence the relationship between attention functioning and substance involvement. Clinical diagnoses of ADHD were not available in this patient population and study. (Tapert SF, Baratta MV, Abrantes AM, Brown SA. Attention dysfunction predicts substance involvement in community youths. *J Am Acad Child Adolesc Psychiatry* June 2002;41:680-686). (Respond: Dr Susan F Tapert, Psychology Service (116B), VA San Diego Healthcare System, 3350 La Jolla Village Drive, San Diego, CA 92161).

COMMENT. Adolescents with impaired attention functioning are at increased risk for development of alcohol and drug involvement.

INFANT CRYING AND RISK OF HYPERACTIVITY AND LEARNING DISORDERS

Infants with persistent crying (PC) in the first 6 months (mean age 3.8 months) were reassessed at 8 to 10 years of age and compared with 64 classroom controls for hyperactivity, conduct problems and academic difficulties in a prospective study at the University of Hertfordshire, UK. Ten (19%) of 53 PC infants had pervasive hyperactivity, as reported by child, parent and teacher, compared with 1 of 62 controls, at school age. Parents and children but not

teachers reported more conduct disorders. Parents rated temperament to be more negative in emotionality and difficult-demanding. Teachers reported significantly lower academic achievement in PC group, especially in those with hyperactivity. Infants with PC also had increased incidence of sleeping or feeding problems. (Wolke D, Rizzo P, Woods S. Persistent infant crying and hyperactivity problems in middle childhood. Pediatrics June 2002;109:1054-1060). (Reprints: Dr Dieter Wolke, University of Hertfordshire, Department of Psychology, Wolke Research Group, Hatfield Campus, College Lane, Hatfield/Herts AL10 9AB, UK).

COMMENT. Infants with persistent crying and associated sleeping or feeding problems are at risk for hyperactive behavior and learning difficulties in childhood.

HEAD CIRCUMFERENCE IN AUTISM, ASPERGER SYNDROME AND ADHD

Occipitofrontal circumference (OFC), measured at birth and after 16 months of age, was compared in 50 consecutive patients with Asperger syndrome, 50 diagnosed with autistic disorder, and 50 with ADHD and followed at the Department of Child and Adolescent Psychiatry, Goteborg University, Sweden. All three groups had mean OFCs at birth and after age 16 months that were larger than normal. Asperger patients' mean OFC was significantly greater than that of the autistic group and the ADHD group. Macrocephaly (defined as OFC >2SDs and height and weight 1SD below that expected for the OCD) was present in 11 of 43 Asperger patients at birth and in 9 of 43 after 16 months. Corresponding rates were 4 of 42 in the autistic group, and 7 of 47 in the ADHD group at birth. Significant correlations between OFC at birth and after age 16 months occurred in the Asperger but not in the autistic or ADHD groups. OFC and IQ were not correlated. Two children with Asperger syndrome who had suffered perinatal asphyxia had microcephaly. Autistic spectrum disorders included a subgroup with macrocephaly and a relatively high level of functioning, with clinical presentation consistent with Asperger syndrome. (Gillberg C, de Souza L. Head circumference in autism, Asperger syndrome, and ADHD: a comparative study. Dev Med Child Neurol 2002;44:296-300). (Respond: Christopher Gillberg MD PhD, Department of Child and Adolescent Psychiatry, Goteborg University, Kungsgatan 12, SE-411 19, Goteborg, Sweden).

COMMENT. One in 4 children with Asperger syndrome and 1 in 10 of those with autistic disorder have macrocephaly when examined after 16 months of age. Among autistic children, macrocephaly is more typical of the highest functioning variant, Asperger syndrome, and is not characteristic of the moderate to low-functioning autistic spectrum disorder.

TICS, ADHD AND PSYCHIATRIC COMORBIDITY

The prevalence of teacher-rated tic behaviors in 3006 school children, from preschool to adolescence, was determined in a study of comorbid psychiatric symptoms at State University of New York, Stony Brook, NY. The prevalence of tic behaviors varied with age: preschoolers (22.3%), elementary school children (7.8%), and adolescents (3.4%). Males were affected more than females, regardless of ADHD symptoms. Prevalence of tics was highest in the ADHD groups, but OCD and social phobia were more common in children with tics. (Gadow KD, Nolan EE, Sprafkin J, Schwartz J. Tics and psychiatric comorbidity in children and adolescents. Dev Med Child Neurol 2002;44:330-338). (Respond: Dr Gadow).