

Elevated levels of lead in paint (2.4% - 40% lead) were found in all six centers tested. Three centers were found to have elevated lead levels in windowsill dust (62000-180000 g Pb/sqM) or soil (530-1100 mg Pb/kgm). Questionnaires completed by parents showed low risk of lead exposure in the homes. Blood lead levels were less than 10 mcg/dL in all but one child. (Weismann DN et al. Elevated environmental lead levels in a day care setting. Arch Pediatr Adolesc Med August 1995;149:878-881). (Respond: Dr Weismann, Department of Pediatrics, University of Iowa Hospitals and Clinics, 200 Hawkins Dr, Iowa City, IA 52242).

COMMENT. The lead-safe home environment, careful supervision, and good personal hygiene of these children would explain the relatively low blood lead levels despite elevated environmental lead levels in the day care centers. Major, costly lead abatement efforts would have been unwarranted in this situation.

Pediatric neurologists evaluating children with ADHD are cognizant of the role of lead exposure in the etiology of learning and behavior problems. The home and play environment questionnaire is important in determining the need for blood lead level determinations. Treatment guidelines for lead exposure in children are outlined in an American Academy of Pediatrics Committee on Drugs report. (Berlin CM Jr et al. Pediatrics July 1995;96:155-160). Chelation therapy is indicated in patients with blood lead levels of 45 mcg/dL and above, and sometimes in those with persistent levels of 25-45 mcg/dL, despite environmental abatement. Chelation is not indicated for levels less than 25 mcg/dL.

ATTENTION DEFICIT DISORDERS

RESPONSE PREDICTION TO METHYLPHENIDATE IN ADHD

The pattern of individual responses to methylphenidate (10 mg) and factors that predict drug response in 46 children, 6-13 years old, with attention-deficit hyperactivity disorder (ADHD) were examined at the Department of Child and Adolescent Psychiatry, and the Rudolf Magnus Institute for Neurosciences, University of Utrecht, The Netherlands. Methylphenidate (MPH) normalized school behavior in one half the subjects, and behavior at home in one third. Behavior both at school and at home was normalized in 17%. Prediction of response to MPH was only successful when stringent, ie cross-situational, response definitions were used. Predictors were a high IQ, much inattentiveness, young age, low severity of disorder, and low rates of anxiety. Positive behavioral changes, measured by the Abbreviated Conners Rating Scales, after a single dose of MPH were predictive of cross-situational improvement after 4 weeks of MPH treatment. (Buitelaar JK et al. Prediction of clinical response to methylphenidate in children with attention-deficit hyperactivity disorder. J Am Acad Child Adolesc Psychiatry August 1995;34:1025-1032). (Reprints: Dr Buitelaar, Department of Child Psychiatry, PO Box 85500, 3508 GA Utrecht, The Netherlands).

COMMENT. The clinical judgment of severity of ADHD and improvement observed after a single dose of methylphenidate are useful predictors of a beneficial long-term response.

The importance of a multimodal treatment approach to ADHD is emphasized by The National Institute of Mental Health's recently initiated 5-year, multisite study. Questions to be answered

include the influence of comorbid conditions, gender, family history, home environment, age, nutritional status; and effects of various treatments (stimulants, behavior therapy, parent training, school-based intervention) on different functions (cognitive, academic, behavioral), for how long (short versus long term), to what extent, and why? (Richters JE et al. NIMH collaborative multisite multimodal treatment study of children with ADHD: I. Background and rationale. J Am Acad Child Adolesc Psychiatry August 1995;34:987-1000).

KLUVER-BUCY SYNDROME FOLLOWING HEAT STROKE

A 12-year-old girl who developed a typical Kluver-Bucy syndrome (KBS) following heat stroke is reported from the University of Minnesota and Gillette Children's Hospital, Minneapolis, MN. The child collapsed and had a 20 min generalized seizure at the end of a 2 mile race run in 40-44 C ambient temperature. Cardiopulmonary resuscitation was necessary during a brief apnea. After iced normal saline infused during transport to the ER her rectal temperature was 102.7 F. Twelve days later she had bowel and bladder incontinence, her affect was flat, she examined objects orally and attempted to eat them, she had no language and could not imitate sounds or words, she could not identify objects, she did not recognize family members, she had marked motor restlessness. After 4 weeks, she was extremely distractible and had limited visual attention. She was unable to dress herself. She was absorbed with her body. Hypersexuality was demonstrated by moving and dancing suggestively, masturbating, and rubbing against objects. She attempted to sit on the lap of adults and to kiss adults of both sexes. Several weeks later, she developed aggressive behaviors. At discharge, she required constant supervision and was dependent on others for all daily needs. MRI at 11 months after heat stroke showed mild, diffuse atrophy. Fourteen months after onset, she did not respond consistently to language, did not communicate verbally, and was dependent on others. (Pitt DC, Kriel RL et al. Kluver-Bucy syndrome following heat stroke in a 12-year-old girl. Pediatr Neurol July/August 1995;13:73-76). (Respond: Dr Kriel, Hennepin County Medical Center #867-B, 701 Park Avenue South, Minneapolis, MN 55415).

COMMENT. The features of Kluver-Bucy syndrome include visual agnosia, hypermetamorphosis (distortion of objects), hypersexuality, language disorder and aphasia, hyperorality, placidity, flat affect, and memory dysfunction. The authors concluded that a metabolic/anoxic encephalopathy associated with heat stroke was the cause of the KBS in this child. In 12 additional reports cited from the literature, anoxic encephalopathy was the most commonly identified cause.

This article is especially appropriate during this exceptionally hot summer. Young athletes should be warned of possible serious consequences of exercise and heat stroke.

PERCEPTUAL-MOTOR DEFICITS AND CONGENITAL MD

Fine motor and perceptuo-motor abilities in 22 children with congenital muscular dystrophy, with and without MRI changes, were evaluated at the Hammersmith Hospital, London, UK. Perceptuo-motor difficulties and minor neurological soft signs were present in those with diffuse MRI changes but not in those with normal MRI. (Mercuri E et al. Minor neurological and perceptuo-motor deficits in children with congenital muscular dystrophy: Correlation with brain MRI changes. Neuropediatrics June 1995;26:156-162).