

repetitive behaviors correlated with rCBF reduction in the left superior temporal gyrus. The more severe the autism, the greater the reduction in rCBF. Social interaction deficits corresponded with dysfunction in the right parietal lobe. (Meresse IG, Zilbovicius M, Boddaert N et al. Autism severity and temporal lobe functional abnormalities. **Ann Neurol** September 2005;58:466-469). (Respond: Dr Zilbovicius, CEA, Serrvice Hospitalier Frederic Joliot, 4 place du General Leclerc, 91406 Orsay, France).

COMMENT. The superior temporal lobe in the dominant hemisphere represents language functions and may be involved in social interaction (Zilbovicius M et al. **Am J Psychiatry** 2000;157:1988-1993). The above study supports the concept of a neurobiological cause for autism, localized to the temporal lobe.

## **ATTENTION DEFICIT DISORDERS**

### **REVERSIBLE DOPAMINE TRANSPORTER MODIFICATIONS IN RESPONSE TO METHYLPHENIDATE TREATMENT OF ADHD**

Single-photon emission computed tomography (SPECT) was used to monitor the dopamine transporter activity in 5 males, ages 8 to 10, with ADHD, after cessation of methylphenidate (MPH) treatment, in a study at the University Hospital Maastricht, The Netherlands. A reduction in dopamine transporter in the striatal system was observed at 3 months after initiation of treatment with MPH. After withdrawal of MPH for a minimum of 4 weeks, following prolonged treatment for 9 to 20 months, dopamine transporter activity had increased to pretreatment levels. Prolonged MPH treatment of ADHD does not cause any permanent modification of nigrostriatal dopaminergic pathways. (Feron FJM, Hendriksen JGM, van Kroonenburgh MJPG et al. Dopamine transporter in attention-deficit hyperactivity disorder normalizes after cessation of methylphenidate. **Pediatr Neurol** Sept 2005;33:179-183). (Respond: Dr Feron, Youth Health Care Division of the Regional Public Health Institute Maastricht, PO Box 3973, 6202 NZ Maastricht, The Netherlands).

COMMENT. In this small pilot study using SPECT, the reduction in dopamine transporter activity induced by MPH in the treatment of ADHD is shown to be reversible after withdrawal of the medication, and no permanent damage to the striatal system results when therapy is prolonged for up to 20 months. The dopamine transporter system appears to be a primary target for MPH in ADHD (Dresel S et al, 2000; Dougherty DD et al, 1999;cited by authors).

### **EFFECT OF ADHD ON THE QUALITY OF LIFE**

The quality of life (QOL), measured with a Child Health Questionnaire (CHQ), was evaluated in 120 untreated children, aged 6 to 12 years, with newly diagnosed attention deficit/hyperactivity disorder (ADHD). Findings were compared with 2 control groups of asthmatic and healthy children, in a prospective, case-control study at Lilly Research Laboratories, Alcobendas, and other centers in Spain. The QOL of ADHD children was impaired compared to controls, the greatest differences found in behavior, social limitations

related to physical problems, self-esteem, emotional effects on parents and family activities. A psychosocial summary score was significantly lower for children with ADHD, compared with asthmatic children. (Escobar R, Soutullo CA, Hervas A et al. Worse quality of life for children with newly diagnosed attention-deficit/hyperactivity disorder, compared with asthmatic and healthy children. **Pediatrics** September 2005;116:e364-e369). (Respond: Rodrigo Escobar MD, Avenida de la Industria, 30, 28108 Alcobendas (Madrid), Spain. E-mail: escobar\_rodrigo@lilly.com).

COMMENT. Children with untreated ADHD have problems with quality of life that affect their behavior, self-esteem, psychosocial and physical functioning, and their relation to parents and families. The findings demonstrate the importance of early recognition and treatment of ADHD.

## MOVEMENT AND MOTOR DISORDERS

### **BOBBLE-HEAD DOLL SYNDROME TREATED SURGICALLY**

A case of a 4-year-old child with bobble-head doll syndrome (BHDS) caused by a suprasellar arachnoid cyst and successfully treated by endoscopic cystovenriculostomy is reported from Medisch Centrum Haaglanden, The Hague; and Academical Hospital Nijmegen, The Netherlands. The cyst collapsed and the aqueductal obstruction resolved. Early surgical treatment of BHDS with suprasellar cyst is recommended to prevent permanent neurologic damage and psychomotor retardation. (Hagebeuk EEO, Kloet A, Grotenhuis JA, Peeters EAJ. Bobble-head doll syndrome successfully treated with an endoscopic ventriculocystocisternostomy. **J Neurosurg (Pediatrics 3)** September 2005;103:253-259). (Eveline EO Hagebeuk MD, Dept Child Neurology, Emma Children Hospital/AMC (G8-205), PO Box 22660, 1100 DD Amsterdam, the Netherlands).

COMMENT. Endoscopic treatment of a suprasellar arachnoid cyst relieved aqueductal obstruction, and an associated bobble-head doll syndrome resolved. BHDS, characterized by a 2-3 Hz back-and-forth head movement, is caused by a suprasellar arachnoid or third ventricular cyst, and less often is secondary to aqueductal stenosis or VP shunt dysfunction. The tremor disappears in sleep and is increased by walking and excitement. It affects children younger than 10 years of age, and may present with macrocephaly, symptoms of raised intracranial pressure, optic nerve atrophy, ataxia, endocrine disorders (small stature, obesity, precocious puberty) or mental retardation. Thirty cases have been reported since the first description by Benton JW and associates (**Neurology** 1966;16:725-729), and are reviewed by the authors.

### **CEREBRAL PALSY DEFINITION AND CLASSIFICATION**

A revised definition and classification of cerebral palsy is proposed by the Executive Committee of an International Workshop held in Bethesda, MD, 2004. (Goldstein M et al. **Dev Med Child Neurol** August 2005;47:571-576; and 508-510). (E-mail: mgoldstein@ucp.org)