

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, Boddart 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