

facioscapulohumeral muscular dystrophy. Ann Neurol June 1996;39:744-748). (Respond: Dr Tawil, University of Rochester, Department of Neurology, Box 673, 601 Elmwood Avenue, Rochester, NY 14642).

COMMENT. These findings have important significance in the genetic counselling of patients with FSHD. No differences in severity of disease were noted between paternally and maternally inherited FSHD, but a reduction in reproductive fitness in male compared to female patients was an unexpected finding.

FSHD with chromosome 9p deletion is reported in a 31-year-old man who also had congenital anomalies and mental retardation studied at Oita Medical University, Hasama-machi Oita 879-55, Japan. (Ueyama H et al. Neurology Feb 1996;46:566-569). A translocation between chromosome 4q and 9p was not detected. The FSHD in this patient was probably not attributable to the 9p deletion syndrome, which consists of the following: mental retardation, trigonocephaly, high-arched eyebrows, micrognathia, wide-spaced nipples, kyphosis, and inguinal hernias.

ATTENTION DEFICIT AND LEARNING DISORDERS

QUANTITATIVE MRI CHANGES IN ADHD

Anatomic brain MRIs for 57 boys with ADHD and 55 healthy matched controls, aged 5 to 18 years, were compared at the National Institute of Mental Health, Bethesda, MD. ADHD subjects had a 4.7% smaller total cerebral volume, a significant loss of normal right>left asymmetry in the caudate nucleus, smaller right globus pallidus, smaller right anterior frontal region, smaller cerebellum, and reversal of normal (L>R) lateral ventricular asymmetry. Whereas ventricular volume increased significantly with age for normal subjects, no age-related changes were found in ADHD subjects. Within the ADHD group, Full-Scale WISC-R IQ score correlated with total cerebral volume. Decreased normal caudate asymmetry was associated with increasing perinatal risk only in the ADHD boys. (Castellanos FX, Rapoport JL et al. Quantitative brain magnetic resonance imaging in attention-deficit hyperactivity disorder. Arch Gen Psychiatry July 1996;53:607-616). (Reprints: F. Xavier Castellanos MD, Child Psychiatry Branch, National Institute of Mental Health, Building 10, Room 6N240, 10 Center Dr, MSC 1600, Bethesda, MD 20892).

COMMENT. Evidence that a lack of normal asymmetry of regional brain structures is involved in the pathophysiology of ADHD is further supported by this study. Decreased volume of the prefrontal cortex, caudate nucleus, and globus pallidus on the right side point to a dysfunction of right-sided prefrontal-striatal systems in ADHD. A decrease in size of the splenium of the corpus callosum, previously reported in ADHD children (see Ped Neur Briefs July 1994;8:55), was not observed.

ACUTE BASAL GANGLIA ENLARGEMENT WITH OBSESSIVE-COMPULSIVE DISORDER, TICS, AND STREP INFECTION

A 12-year-old boy with an acute exacerbation of obsessive-compulsive disorder (OCD) symptoms and tics following a Group A B-hemolytic streptococcal (GABHS) throat infection is reported from the National Institute of Mental Health, Bethesda, MD. Family history included Sydenham's chorea in a maternal grandfather, OCD in the mother and paternal aunt, and Tourette's

syndrome in his 16-year-old brother. The boy had excessive throat-clearing, hyperactivity, and choreiform movements. Antistreptolysin O and DNase B titers were elevated and a throat culture was positive for GABHS. Serial MRI scans performed to assess basal ganglia morphology in relation to symptom severity before and during plasmapheresis showed an initial caudate measure greater than two standard deviations above the mean for healthy boys. Within 1 day of the first plasmapheresis, the caudate volume decreased 24%, the putamen 12%, and the globus pallidus 28%. These fluctuations in the size of the basal ganglia correlated with the severity of symptoms of OCD which showed amelioration after plasmapheresis and a course of amoxicillin. The acute enlargement of the basal ganglia was most pronounced when the throat culture was positive for GAGHS. Less dramatic changes in size accompanied subsequent exacerbations of OCD, which occurred with negative throat cultures. (Giedd JN, Rapoport JL et al. Case study: Acute basal ganglia enlargement and obsessive-compulsive symptoms in an adolescent boy. J Am Acad Child Adolesc Psychiatry July 1996;35:913-915). (Reprints: Dr Giedd, NIMH, Child Psychiatry Branch, Building 10, Room 6N240, 10 Center Drive MSC 1600, Bethesda, MD 20892).

COMMENT. A link between obsessive-compulsive disorder and basal ganglia dysfunction is supported by this case-study. The swelling of the basal ganglia was thought to represent an inflammatory reaction with edema secondary to a cross-reaction of antibodies against the invading bacteria.

An association between B-hemolytic streptococcal infection and Tourette's syndrome in children with ADHD was previously correlated with serum antibodies against human caudate nucleus sections and elevated antistreptolysin titers in a study at Brown University, RI. (Kiessling IS et al. see Progress in Pediatric Neurology II, PNB Publ, 1994, pp236-7). Immunological treatments for autoimmune neuropsychiatric disorders associated with streptococcal infections, including ADHD and co-morbid symptoms, deserve further study.

EARLY SCREENING FOR LEARNING DISABILITIES

The value of child health surveillance (CHS) practices in early detection of mild to moderate learning difficulties (LD) was investigated at the North and West Belfast Community Paediatric Unit, Belfast, N Ireland. The prevalence of learning difficulties in this deprived inner city area was 16%. Only 6% of children with LD were identified by the CHS in the preschool period. Perinatal variables associated with LD were lower social class, prematurity, male sex, and birth to an unmarried mother. Risk factors used in the CHS which proved to be insensitive included speech delay, poor parenting, behavior problems, enuresis, poor visual acuity, and otitis media with effusion. (Corrigan N, Stewart M et al. Predictive value of preschool surveillance in detecting learning difficulties. Arch Dis Child 1996;74:517-521). (Respond: Dr N Corrigan, Altnagelvin Area Hospital, Londonderry, N Ireland).

COMMENT. Child Health Surveillance (CHS) by health visitors, at birth, 6 weeks, 6, 12, and 18 months, 2,3, and 4 years, failed to detect the majority of children with mild learning difficulties and missed 38% of the moderately learning disabled. Retrospective analysis of the child health record failed to identify a model to predict children with later LD. The failure of CHS in this setting was attributed to a combination of poor test sensitivity and the overlap of LD with variants of developmental norms. Nursery school and preschool