Athens, and the Department of Neurology, Medical College of Georgia, Augusta, and the Athens Magnetic Imaging. The genu of the corpus callosum was significantly smaller in the dyslexic children. Familial left-handedness, and ADD with and without hyperactivity distinguished the dyslexic children from controls. (Hynd GW et al. Dyslexia and corpus callosum morphology. Arch Neurol January 1995;52:32-38). (Respond: Dr George W Hynd, Center for Clinical and Developmental Neuropsychology, 570 Aderhold Hall, The University of Georgia, Athens, GA 30602).

> COMMENT. Studies of MRI morphology of the corpus callosum in monozygotic twins at Dartmouth Medical School Program in Cognitive Neuroscience showed wide variations in size and shape of the human corpus callosum. Measurements revealed greater similarity in twin pairs than in randomly paired controls. (Ann Neurol 1989;26:100). The anatomy of the corpus callosum appears to be under genetic control as well as being influenced by nongenetic factors. How much this natural variation in size of the corpus callosum influenced the results of the above study in dyslexia is debatable. (see Progress in Pediatric Neurology I, PNB Publ, 1991, pp 168-9).

SILVER-RUSSELL SYNDROME AND COGNITIVE DISORDERS

Cognitive abilities of 20 boys and 5 girls, aged 6 to 11 years, with Silver-Russell syndrome were investigated at the Prince of Wales Hospital, Shatin, Hong Kong, the Institute of Child Health, and Middlesex Hospital, London, UK. The mean full scale IQ was 86, and 32% scored <70. Reading comprehension was 24 months below chronological age in 40%. Speech therapy was required in 48%. IQ scores were positively correlated with growth in head circumference. (Lai KYC et al. Cognitive abilities associated with the Silver-Russell syndrome. Arch Dis Child Dec 1994;71:490-496). (Respond: Professor D Skuse, Institute of Child Health, London, UK).

> COMMENT. Features of Silver-Russell syndrome include low birth weight, short stature, body asymmetry, clinodactyly, and craniofacial dysmorphism - small triangular face, large forehead, small chin, shark's mouth, and low set ears. The present study adds cognitive disorders to the list of features. Intrauterine growth retardation of Silver-Russell syndrome beginning early in pregnancy results in reduction in both birth weight and length. In this "symmetrical" type of growth retardation, in utero brain development is more likely to be affected than when growth retardation begins late in pregnancy.

INFECTIOUS DISORDERS

CONGENITAL TOXOPLASMOSIS: TREATMENT AND OUTCOME

Neurologic, cognitive, and motor outcomes for 36 children with congenital toxoplasmosis treated with pyrimethamine and sulfadiazine for 1 year are reported from Michael Reese Hospital, Chicago, IL, and other Centers. Active infection, seizures, and motor abnormalities resolved in most during therapy. Of 29 infants evaluated at 1 year of age, 23 (79%) had a Mental Developmental Index of 102, and 6 had scores <50. Sibling controls had higher scores than patients, but sequential IQ testing showed no deterioration over time. Six of eight children with obstructive hydrocephalus relieved by shunts

had normal neurologic and developmental outcomes. In contrast, of 10 with hydrocephalus ex vacuo from birth, eight had severe disabilities. Nine of 34 (26%) children had microcephaly. Of those presenting with chorioretinal lesions (69%), the majority had residual visual loss after therapy. Risk factors for poor outcome included diabetes insipidus, hypoxia, hydrocephalus with high CSF protein, and delay in medical treatment. These results compared to previous reports for untreated children were thought to justify treatment of pregnant women with acute gestational Toxoplasma infection and young infants with congenital toxoplasmosis. (Roizen N, Swisher CN et al. Neurologic and developmental outcome in treated congenital toxoplasmosis. Pediatrics January 1995;95:11-20). (Reprints:Dr Rima McLeod, 114 Baumgarten, Department of Medicine, Michael Reese Hospital, 2929 South Ellis Ave, Chicago, IL 60616).

> COMMENT. One third of the treated patients were severely impaired neurologically, and two thirds of those with normal developmental outcomes had retinal lesions and visual problems. The need for prevention and improved therapies was emphasized.

CT AND IQ IN HIV DISEASE

Measures of cognitive function and social-emotional behavior were correlated with CT abnormalities in 87 children with symptomatic human immunodeficiency virus type 1 disease (HIV) at the Pediatric Branch, National Cancer Institute, and the NIND & S, Bethesda, MD; Children's National Medical Center, Washington, DC; and Medical Illness Counselling Center, Chevy Chase, MD. The mean age of the patients was 4.3 yrs. Vertically infected children were 2.3 +/- 0.3 years, and transfusion-infected children were 8.4 +/- 0.6 years of age. The Full Scale IQ (FIQ) was a mean of 85.2 for the total group; 80 for vertically infected; and 95.5 for transfusion-infected patients. A significant correlation was found between FIQ and the overall CT severity rating. The correlation was stronger in (younger) vertically infected compared with older transfusion-infected children. Calcifications, observed only in vertically infected children (16 of 58), were associated with greater delays in neurocognitive development, independent of the degree of brain atrophy. (Brouwers P, DeCarli C et al. Correlation between computed tomographic brain scan abnormalities and neuropsychological function in children with symptomatic human immunodeficiency virus disease. Arch Neurol Jan 1995;52:39-44). (Reprints: Dr Brouwers, Pediatric Branch, National Cancer Institute, National Institutes of Health Clinical Center, Room 13N240, Bethesda, MD 20892).

COMMENT. CT scans are recommended as a baseline for patients at risk for CNS manifestations and cognitive deficits due to HIV. Even when mild, CT abnormalities were of clinical significance.

The above authors have studied the effects of HIV disease on receptive and expressive language in 36 children with symptomatic HIV and the relation to CT scan brain abnormalities (Wolters PL, Brouwers P et al. Pediatrics Jan 1995;95:112-119). Expressive language was more impaired than receptive language. Greater severity of CT abnormalities was correlated with poorer receptive and expressive language functioning. The language impairments were associated with the direct effects of HIV-related CNS disease.

A speech motor control disorder developed after HIV infection in 6 right-handed patients. They had an ataxic dysarthria, associated with ataxic gait and intention tremors. The motor speech disorder was due to a cerebellar dysfunction. (Lopez OL et al. Neurology 1994;44:2187-2189).