COMMENT. The MRI has proved of value in defining the extent of brain lesions with greater precision than was previously possible and has provided more accurate information regarding the areas of the callosum that are cut in the split brain patient. This study has helped to specify the functional zones of the human callosum in regard to cognition. A second paper regarding magnetic resonance imaging morphology of the corpus callosum in monozygotic twins is published from the same Program in Cognitive Neuroscience of Dartmouth Medical School (Ann Neurol July 1989; 26:100-104). There are wide variations in the size and shape of the human corpus callosum and measurements of size and shape revealed greater similarity in twin pairs than in randomly paired controls. The results were consistent with the view that the anatomy of the corpus callosum is under genetic control as well as being influenced by nongenetic factors.

TRANSIENT INFANTILE HYPERTONICITY AND LEARNING DISABILITIES

The neuromotor and developmental progress of 33 children who had transient hypertonicity during early infancy was analyzed and reported from the Stanley S. Lamm Institute, Long Island College Hospital, Brooklyn, NY. Seventeen children were mildly affected while 16 were moderately affected. Hypertonia was present in all four limbs in 24%, the lower limbs were more involved in 48% and hypertonicity was asymmetric in CT scans in the immediate newborn period showed subarachnoid 24%. hemorrhage in 6 and leukomalacia in 1. Subsequent CT scans were normal. EEG's showed no significant abnormality in 12 infants at 3-17 months of age. Gross motor milestones were fairly satisfactory in all children, and independent walking was achieved between 8-20 months of age, 75% by 15 months. Hypertonicity disappeared at 9-18 months of age. Independent walking occurred after 14 months of age in 12 patients whereas resolution of hypertonicity had occurred in the majority of the patients before 14 months of age. At 2-3 years of age developmental abnormalities were identified in more than 2/3 of the children. Delays in speech and language development and also in fine motor, adaptive and behavior difficulties were most frequently present. At five years of age or older learning disabilities were frequent and they were associated with persistent language and perceptual problems. None had epilepsy and mental retardation occurred in only two. Reading disability was diagnosed in 14 of 25 children older than 5 years of age (42%) compared to a figure of 4% in the general population. (PeBenito, R et al. Residual developmental disabilities in children with transient hypertonicity in infancy. Pediatr Neurol May/June 1989; 5:154-60).

<u>COMMENT</u>. The hypertonic infant at risk for language and learning disabilities should receive regular neurological and developmental follow-up evaluations through early childhood despite resolution of the increased tone and normal motor milestones. Early therapeutic intervention is advised.