of swallowing are findings common to cerebral cortical disturbances in the newborn caused by hypoxia, meningitis, hemorrhage or hydrocephalus. Most human neonatal seizures are focal or multifocal and arise in the cerebral cortex and are relayed by the corticospinal tract to spinal motor neurons and to facial and hypoglossal nuclei by the corticobulbar tract. Some neonatal seizures are subcortical in origin. The corticospinal tract probably does not influence muscle maturation because muscle shows histochemical differentiation at 20-28 weeks gestation, long before myelination of the corticospinal tract begins. Cerebellar influence on muscle tone and coordination is mediated mainly by the corticospinal and corticobulbar tracts. Hypotonia is among the most constant clinical findings in infants with cerebellar hypoplasia. (Sarnat HB. Do the corticospinal and corticobulbar tracts mediate functions in the human newborn? Can J Neurol Sci 1989; 16:157-160).

COMMENT. Dr. Sarnat's research concerning the development of the corticospinal tract in the newborn aids the clinician in his understanding of reflexes, seizures, and muscle tone and posture. In another recent study, acridine orange, a fluorochromic stain of nucleic acids, was used to study neural maturation in human brains during development. The increase in cytoplasmic RNA of neurons coincided with the onset of neurotransmitter synthesis, and the presence of orange fluorescence in heterotopic nerve cells served as a marker of the state of maturity and degree of migration. (Sarnat HB. Rev Neurol (Paris), 1989; 145:127-133).

DEGENERATIVE DISORDERS

MOTOR DISORDERS IN RETT SYNDROME

The motor and behavioral findings in 32 patients with Rett syndrome aged 21 months to 30 years, are reported from the Departments of Neurology and Pediatrics, Baylor College of Medicine, Houston, TX. Hand stereotypies and gait abnormalities were present in all patients. Clapping, wringing, and clenching were the most common, followed by washing, patting, and rubbing movements. Gait ataxia was present in 31%, a broad based gait in 13%, and inability to walk in 28%. Bruxism was the next most common involuntary movement (97%) and occurred only when awake. Drooling occurred in 75%. Other motor disturbances included ocular deviations (63%), parkinsonian rigidity (44%), bradykinesia (41%), dystonia (59%), sometimes focal and sometimes associated with scoliosis (50%). Myoclonus, choreoathetosis and intention tremor also occurred. Hyperkinetic disorders were prominent in younger patients and bradykinetic disorders occurred more frequently in older patients. (FitzGerald PM et al. Extrapyramidal involvement in Rett's syndrome. Neurology Feb 1990; 40:293-295).

COMMENT. The number of cases and the plethora of published reports on Rett syndrome add credence to the viral infectious cause postulated by Hagberg (see Ped Neur Briefs 1989; 3:44). A toxic environmental cause might also be considered and pursued further.