had elicited diverse cognitive syndromes (i.e. acalculia, agraphia, alexia, anomia, constructional apraxia, finger agnosia, and right-left disorientation). Stimulation of adjacent loci, between the angular and supra-marginal gyri, had produced a complete Gerstmann syndrome without accompanying deficits.

## THALAMIC LESIONS IN INFANCY

The clinical, pathologic and etiologic characteristics of thalamic lesions in infancy are reviewed in an editorial. During the past 30 years, two distinct patterns of thalamic hemorrhagic insult in infants have been described, with different etiology, clinical presentation, scan appearance and prognosis. Intrauterine infection with cytomegalovirus, rubella, or toxoplasma and streptococcal and pneumococcal meningitis have also been associated with bilateral thalamic calcification and spastic quadriplegia. Genetic factors have been described occasionally, including a rare autosomal recessive encephalopathy; and chromosomal trisomies 21 and 13 have also been linked with thalamic echogenicity. An asphyxial insult may occur before birth, perinatally or postnatally. Most affected infants were born at term, the thalamic changes were always bilateral, and the MRI was the most sensitive technique in diagnosis.

In one pattern of thalamic hemorrhagic or asphyxial insult, the neurologic abnormalities presented at birth. Many infants died in the neonatal period or early childhood and all survivors were severely handicapped. In another pattern of thalamic lesion, previously healthy term infants with primary thalamic hemorrhage presented acutely at age 11-14 days with seizures, opisthotonos and facial weakness. There was eye deviation to the side of the hemorrhage and a sunsetting phenomenon. In these infants the neurologic outcome was good: 1 child was normal at 20 months and 3 had only mild spastic hemiparesis. In almost 2/3 of term infants with intraventricular hemorrhage the primary lesion is in the thalamus. (Editorial. Thalamic lesions in infancy. The Lancet May 9, 1992; 339:1143-1145.)

COMMENT. Thalamic lesions may occur independently of cortical lesions but are always found when cortical or subcortical damage is present. Etat marbre (status marmoratus), characteristically associated with athetoid forms of cerebral palsy, is seen as a hypermyelination in association with striatal marbling or as an isolated phenomenon. Thalamic involvement underlies the severe mental deficiency found in some cases of congenital athetosis. (Norman RM. In Greenfield's Neuropathology, Baltimore, Williams and Wilkins, 1963, 391-393.)

## SEIZURE DISORDERS

## VALPROATE-INDUCED PUBERTAL ARREST

A 12-year-old girl with complex partial seizures who had pubertal arrest of both growth and secondary sexual development while receiving VPA is reported from the Department of Pediatrics, Wright State University, Dayton,