Neurology Service (V-151), VA Medical Center, 3350 La Jolla Village Drive, San Diego, CA 92161.)

COMMENT. Yamamoto H has also found a significant inverse correlation with aging in the CSF neurotransmitters during the neonatal period (Pediatr Neurol 1991; 7:406-10). Langlais PJ, Wardlow ML, and Yamamoto H report marked increases in 5-hydroxyindoleacetic acid and decreases in kynurenine levels in the CSF of 5 infants whose infantile spasms were eliminated or reduced following treatment with ACTH. The elimination of seizures by ACTH was accompanied by increased serotonin turnover (Pediatr Neurol 1991: 7:440-5).

Treatment of infantile spasms with IV gamma-globulins (1g/kg/day, the first 2 days, every 3 weeks, for 6 months) is reported in a prospective study of 23 children from the Unite de Neuropediatrie, Centre Gui de Chauliac, 34059, Montpellier, France (Echenne B et al. Brain Dev; 1991; 13:313-9). Five patients responded satisfactorily and 15 received no benefit. Deficiencies of IgA in one patient, IgG2 in 3, and IgG1 in one showed no correlation with therapeutic results. IV gamma-globulin is recommended only as an auxillary therapy and not the treatment of choice for infantile spasms.

#### OTHER PAROXYSMAL DISORDERS

### PAROXYSMAL OCULAR DOWNWARD DEVIATION

Paroxysmal ocular downward deviation in 13 children with spastic quadriplegia, mental retardation and cortical visual impairment is reported from the Department of Pediatric Neurology, Seirei-Mikatabara General Hospital, Hamamatsu, Shizuoka, Japan. The ocular abnormality was observed in infancy, predominantly in pre-term infants and it resolves spontaneously in many by 2 years of age. The movement differed from the setting sun sign or tonic downward deviation and was not accompanied by retraction of the eyelids. No patient had hydrocephalus or kernicterus (Yokochi K. Paroxysmal ocular downward deviation in neurologically impaired infants. Pediatr Neurol Nov/Dec 1991; 7:426-428). (Correspondence: Dr. Yokochi, Department of Pediatric Neurology, Seirei-Mikatabara General Hospital, Mikatabara 3453, Hamamatsu, Shizuoka 433, Japan.)

COMMENT. The CT and MRI in these patients showed periventricular leukomalacia or multicystic encephalomalacia with involvement of optic radiations. Paroxysmal ocular downward deviation is proposed as a new sign of brain damage with central visual impairment, particularly in preterm infants.

Transient chronic **upgaze** differs from that of the transient variety of tonic downgaze deviation of the eyes in newborns, being more persistent and exacerbated by fatigue or illness (see <u>Progress in Pediatric Neurology</u> Millichap ed. 1991, p. 139).

# SHUDDERING ATTACKS

The successful treatment of shuddering attacks with a beta-adrenergic blocker (propranolol) in a 3 year old girl is reported from the Division of Pediatric Neurology, Children's Hospital of Philadelphia, University of Pennsylvania, Philadelphia PA. The girl was admitted with a 3 week history of shaking episodes described as jerking and shivering 5 to 6 times a day. There was no loss of consciousness. The problem was first diagnosed as a tic since eye blinking had also been present for several months. The family history was negative for tremor or other movement disorders. neurological exam showed episodes of head flexion with adduction and flexion of the arms and knees without loss of consciousness or postural tone. Within 2 weeks of starting propranolol 0.5 mg/kg/d the movements had ceased. When therapy was discontinued 2 months later, the shuddering resumed within a week and responded once again to propranolol therapy at 1/2 the original dose. A second attempt to discontinue therapy resulted in a prompt return of the shuddering attacks and the necessity for further treatment (Barron TF, Younkin DP. Propranolol therapy for shuddering attacks. Neurology Jan 1992: 42:258-259). (Reprints: Dr. Todd F. Barron, Division of Pediatric Neurology, The Milton S. Hershey Medical Center, P.O. Box 850, Hershey, PA 17033.)

COMMENT. It is proposed that the etiology and response to therapy of both essential tremor and shuddering attacks may be mediated by similar mechanisms. This appears to be the first report of successful treatment of shuddering attacks with propranolol. A family history of essential tremor has previously been reported in patients with shuddering spells and some manifested both shuddering and tremor (Vanasse M et al. Neurology 1976; 26:1027). Shuddering attacks have also been related to an intolerance to monosodium glutamate in children (Reif-Leahrer L, Stemmermann MG. Nengl J Med 1975; 293:1204).

#### BRAIN TUMORS

# POST-SURGICAL CEREBELLAR MUTISM

Mutism immediately following removal of a large midline posterior fossa medulluloblastoma and a cerebellar arteriovenous malformation is reported in 2 children from the Department of Neurosurgery, University of Florida, Gainsville, FL. The 7 year old boy with medulluloblastoma showed only a mild dysarthria and truncal ataxia at 3 month follow up and a 15 year old girl with acute posterior fossa bleed and obstructive hydrocephalus was similarly affected by a dysarthria and truncal ataxia when examined at 3 months. A review of the literature disclosed 19 cases of transient mutism after surgical removal of posterior fossa tumors. The more widespread the