COMMENT. LND is an X-linked recessive neurobehavioral disorder of purine metabolism caused by deficiency of the purine salvage enzyme hypoxanthine-guanine phosphoribosyltransferase (HPRT). The triad of clinical manifestations, mental retardation, self-injurious behavior, and motor disability, develops after birth, and the extrapyramidal movements are evident in the second year of life. In the present report, hypotonia and dystonia were more frequent than spasticity, noted in earlier descriptions of the syndrome. The authors attribute these discrepancies in neurological findings to a possible misinterpretation of a "striatal toe" as a Babinski reflex, and changes in signs with age, not observed in retrospective studies. In laboratory tests, serum uric acid is elevated, and diagnosis is confirmed by a urinary uric acid-creatine ratio of 2:1 or higher, and enzymatic analysis of blood, cultured skin fibroblasts, or prenatal, amniotic fluid (Menkes JH, 1985).

SEIZURE DISORDERS

LONG-TERM FOLLOW-UP OF JUVENILE MYOCLONIC EPILEPSY

A population of 257 juvenile myoclonic epilepsy (JME) patients and family members was prospectively evaluated in a study at UCLA School of Medicine and international centers. Patients were subdivided into four groups: 1) classic JME [186 patients]; 2) childhood absence epilepsy (CAE) evolving as JME with GM, myoclonic and absence seizures [45]; 3) JME mixed with adolescent onset pyknolepsy [18]; and 4) JME plus astatic seizures [8]. JME was the sole clinical phenotype in 40% of JME family members, followed over a mean of 11+/−6 years (max 52 years); grand mal (GM) occurred in 35%. Absence seizures were more common in family members of CAE evolving to JME than in those of classic JME families; 66% of CAE families evolving to JME had various phenotypes of idiopathic generalized epilepsy (IGE). Patients with CAE evolving to JME showed female preponderance, maternal transmission and poor response to treatment; 7% were seizure free cf 58% of those with classic JME (P<0.001), 56% with JME and pyknolepsy, and 62% with JME plus astatic seizures. The various epilepsy syndromes persisted into adulthood; as long as 11-50 years in 25 patients ages 21 to 52 years. JME is genetically heterogeneous, with 7 known chromosome loci, 3 epilepsy-causing mutations and 2 genes with single nucleotide polymorphisms. (Martinez-Juarez IE, Alonso ME, Medina MT et al. Juvenile myoclonic epilepsy syndromes: family studies and long-term follow-up. Brain May 2006;129:1269-1280). (Respond: Dr Antonia V Delgado-Escueta, Epilepsy/Genomics Laboratories, Comprehensive Epilepsy Program, David Geffen School of Medicine at UCLA and VA GLAHS-West Los Angeles, Room 3405 (127B), Bldg 500, West Los Angeles VA Medical Center, 11301 Wilshire Bldg, Los Angeles, CA 90073).

COMMENT. The authors suggest the inclusion of 4 syndromes under IGE in the ILAE Classification, based on the above study: (1) classic JME; (2) pyknoleptic CAE evolving to JME; (3) JME with adolescent onset pyknoleptic absences; and (4) JME with astatic seizures. CAE that evolves into JME should be separated from CAE that remits in adolescence and does not develop myoclonic seizures. Perioral reflex myoclonias, the leading seizure type in reading epilepsy, is more frequent in JME compared to focal epilepsies, according to Mayer TA et al. (Epilepsia June 2006;47:1059-1067). PRM may be induced by reading, writing or talking.