Changes included prolonged metabolic acidosis, decreased blood potassium, lower heart rate, and higher mean blood pressure, but were not associated with clinical complication. Unusual MRI findings in 3 infants were sinus thromboses and cerebral infarction. Six infants had normal follow-up neurologic exams or only minor abnormalities. Three infants died and 1 had major abnormalities. EEG activity returned to a more continuous pattern by 13 hours in 5 infants, although seizures recurred. EEG suppression was greater in infants with a poor outcome than in the 6 who recovered. Of 6 untreated infants with a normal initial EEG, none developed severe encephalopathy or neurologic sequelae. (Azzopardi D, Robertson NJ, Cowan FM et al. Pilot study of treatment with whole body hypothermia in neonatal encephalopathy. Pediatrics October 2000;106:684-694). (Reprints: Denis Azzopardi MD, FRCP, Department of Pediatrics, Imperial College School of Medicine, London, UK).

COMMENT. Prolonged mild hypothermia has been evaluated in the treatment of asphyxiated neonates at high risk of developing severe neonatal encephalopathy. A burst suppression pattern in the EEG is indicative of increased risk of severe encephalopathy and possible trial of hypothermia.

## OUTCOME OF NEONATAL CEREBRAL INFARCTION

The long-term neurodevelopmental outcome of CT-documented cerebral infarction was evaluated in 46 children followed for a mean of 42 months (range, 18-164 months) at the Glenrose Rehabilitation Hospital, and University of Alberta, Edmonton, Canada. Outcome was normal in 15 and abnormal in 31, with multiple disabilities in 23, cerebral palsy in 22, and cognitive impairment in 19. Risk factors for long-term disability were neonatal seizures and abnormal neurologic exam at discharge. (Sreenan C, Bhargava R, Robertson CMT. Cerebral infarction in the term newborn: clinical presentation and long-term outcome. J Pediatr September 2000;137:351-355). (Reprints: Charlene Robertson MD, FRCPC, Neonatal and Infant Follow-up Clinic, Glenrose Rehabilitation Hospital, 10230-111 Ave, Edmonton, Alberta, Canada T5G 0B7).

COMMENT. The long-term outcome in term neonates with cerebral infarction is normal in one third and abnormal in two thirds. Risk factors for disability are seizures and an abnormal neurologic examination at the time of discharge.

# MENTAL RETARDATION SYNDROMES

## FRAGILE X SYNDROME WORKSHOP

The proceedings of the 9th International Workshop on Fragile X Syndrome and X-Linked Mental Retardation, held in Strasbourg, France, are reported from the University Hospital of Leuven, Belgium.

Several examples of X-Linked MR syndromes were presented.

*Mohr-Tranebjaerg syndrome* (MTS), characterized by deafness, dystonia and mental retardation (MR), was discussed as a mitochondrial disorder with a gene named DDP for deafness/dystonia peptide. Among a set of 8 patients with MTS, only one of 4 studied showed ragged-red fibers on muscle biopsy whereas 4/4 had increased numbers of mitochondria.

In two papers on *fragile X syndrome* (FXS), a total of 27 children (24 boys and 3 girls), the diagnosis had been missed by the referring physicians. Clinical manifestations were nonspecific, a positive family history was not considered, or