somnambulism as forms of epilepsy, but does not describe a case similar to the above report. (Epilepsy and Related Disorders. Boston, Little, Brown, 1960).

A young man presented with episodes of unexplained hypersomnolence lasting 24-48 hrs in my own practice. An EEG between episodes showed occasional temporal sharp waves. CT and metabolic studies were normal. An EEG recording during an attack could not be obtained. A trial of phenytoin was successful in this case, and attacks recurred when treatment was discontinued. A seizure disorder was suspected but not proven.

Sleep disorders with central hypoventilation syndrome and seizures is reviewed in Progress in Pediatric Neurology II, Chicago, PNB Publ, 1994, pp 192-4.

TOXIC DISORDERS

ALCOHOL-RELATED PERINATAL BRAIN INJURY IN PREM'S

The relation between maternal alcohol use and intraventricular hemorrhage in 349 prematures weighing 2000 g or less was examined by the Neonatal Brain Hemorrhage Study Team at the Epidemiology Department, Michigan State University, East Lansing, MI; National Institute of Environmental Health Sciences, Research Triangle Park, N Carolina; and the Dept of Pediatrics and Clinical Epidemiology, University of Pennsylvania School of Medicine, Philadelphia, PA. Infants of women reporting "high" alcohol use (7 or more drinks per week and/or 3 or more per occasion) during preganancy were at increased risk of developing brain hemorrhage and white matter damage. (Holzman C et al. Perinatal brain injury in premature infants born to mothers using alcohol in pregnancy. Pediatrics January 1995;95:66-73).

COMMENT. Premature infants of mothers who are high alcohol consumers during pregnancy have an increased risk of brain damage. Mothers' alcohol use before pregnancy had no observed adverse effect on the infant. However, alcohol taken during breast feeding may cause delay in motor development. (see Progress in Pediatric Neurology I, Chicago, PNB Publ, 1991, pp448-50).

The fetal alcohol syndrome (FAS) in adolescence was studied in 44 patients followed for 10-14 years at the Department of Pediatrics, Rittberg Hospital of the German Red Cross, Berlin, Germany, and the Department of Child and Adolescent Psychiatry, University of Zurich, Switzerland. (Spohr HL et al. Acta Paediatr Nov 1994;404:19-26). Although the pronounced growth retardation and dysmorphism of the early childhood FAS diminishes in the older child, a characteristic syndrome remains. The "juvenile" pattern of FAS showed the following features: microcephaly, growth retardation, cognitive deficits, behavioral problems, and craniofacial dysmorphism consisting of short palpebral fissures, thin upper lip, prominent nasal bridge, maxillary hypoplasia, strabismus, and malaligned teeth.

In a study of 64 families with alcoholism at the Karolinska Institute, Stockholm, Sweden, children had retarded development and more behavioral problems than controls until 4 years of age. Boys were more vulnerable than girls. Behavioral disorders were more pronounced when both parents were alcoholic. (Nordberg L et al. Acta Paediatr Nov 1994;Suppl 404:14-18).

MANGANESE SUPPLEMENTS AND DYSTONIA

A 7 month old girl who developed dystonic movements of the arms after a 3 month period of parental nutrition for jejunal atresia and bowel resection is reported from Great Ormond Street Hospital, London, UK. Development and head growth stopped at 12 months. Liver function tests showed cholestatic liver disease, a complication of parenteral nutrition. MRI showed basal ganglia changes in T1 weighted images compatible with trace metal deposition. A high blood manganese of 1740 nmol/L (ref. 73-210 nmol/L) was diagnosed at 17 months. She died 1 month later with neurological deterioration. A subsequent investigation of 53 children who had been on parenteral nutrition for more than 6 weeks showed that all those with cholestatic liver disease (35/53), and consequent impairment of biliary excretion of manganese, had whole blood manganese levels of >360 nmol/L. The parenteral supplement in the UK contained 55 times more manganese than that recommended by the American Society for Clinical Nutrition. This product has now been replaced with one containing 1 mcg/kg manganese, in line with the American guidelines. (Reynolds AP, Kiely E, Meadows N. Manganese in long term paediatric parental nutrition. Arch Dis Child Dec 1994;71:527-528). (Respond: Dr Reynolds, Department of Chemical Pathology, Great Ormond Street Hospital, Great Ormond St, London WC1N 3JH, UK).

COMMENT. Blood manganese should be monitored in patients on parenteral nutrition, especially those who develop cholestatic liver disease. MRI is recommended if blood manganese is >360 nmol/L and/or if patient develops dystonia.

Manganese poisoning with dystonia in an 8 year old girl with Alagille's syndrome (hepatic duct hypoplasia, chronic cholestasis, facial dysmorphism, vertebral malformations, retarded development, and cardiac murmur) responded to treatment with ursodeoxycholic acid (see Progress in Pediatric Neurology II, Chicago, PNB Publ, 1994, pp438-9). Toxicity from dietary sources of manganese appears to require a prolonged period of exposure before neurologic symptoms develop.

THALLIUM POISONING

Four young adults poisoned with thallium contained in maliciously contaminated marzipan ball candy are reported from the New York City Poison Center, and East Carolina University School of Medicine, Greenville, NC. Gastrointestinal symptoms, including diarrhea, vomiting, abdominal cramps, and constipation, and pleuritic chest pains developed on the second day, and painful paresthesiae of hands and feet on the third day. Weight bearing caused pain in the soles of the feet, so that walking was avoided. Stroking the back of the hands elicited severe pain. Radiographs of the candies showed metallic densities, and atomic absorption spectroscopy measurement of thallium content was 4 g/100g candy. Radiographs of the abdomen on the third day were negative for radiopaque thallium. Hypertension and tachycardia developed on day 4 to 8, and alopecia onset began on day 8 to 15. Treatment consisted of prussian blue (2 g 3x/d orally) to bind enteric thallium, activated charcoal orally, potassium chloride infusion, and iv morphine for pain. All patients recovered without sequelae within one month. (Meggs WJ et al.