and coordination may be more sensitive indicators of the adverse effects of lead on the central nervous system than tests of intelligence and academic achievement. Lead poisoning is now defined as a blood lead level greater than or equal to 10 mcg/dL. Children aged 6 months to 6 years and those living in older housing are the highest priority for screening, mandatory in many States.

INTRACRANIAL TUMORS

MENINGIOMAS: MRI AND PATHOLOGICAL FINDINGS

MRIs and histopathological studies of five children, aged 3 months to 16 years, with extra-axial meningiomas are reported from the Arkansas Children's Hospital and University of Arkansas for Medical Sciences, Little Rock, AR. Two tumors were supratentorial and three were in the posterior fossa. Two located on the tentorium presented with headache, and one at the foramen magnum caused quadriparesis. All were hyperintense on proton density- and T2-weighted images and showed intense contrast enhancement on T1-weighted images. Two were meningotheliomatous, one transitional, one chordoid, and one hemangiopericytic variant of meningioma. Chromosome 22 deletions were found in two of four tumors studied. (Glasier CM et al. Meningiomas in children: MR and histopathologic findings. AJNR Jan/Feb 1993; 14: 237-241). (Reprints: Charles M Glasier MD, Department of Radiology, Arkansas Children's Hospital, 800 Marshall Street, Little Rock, AR 72202).

COMMENT. Meningiomas in children are rare (1 to 3% of intracranial tumors) and much less common than in adults (15%). About 25% of meningiomas in children are associated with neurofibromatosis, especially type 2.

HEADACHE AS FIRST SYMPTOM OF CEREBRAL TUMOR

Five children, ranging in age from 10 months to 4 years, all presenting initially with headache, with or without vomiting, and in whom the final diagnosis was intracranial tumor, are reported from Petah Tiqva, Israel. The initial neurologic examination, including the fundi, was normal in three patients with craniopharyngioma, pinealoma, and cerebellar astrocytoma. Two patients with medulloblastoma and fourth ventricle choroid plexus papilloma had abnormal neurologic findings at presentation. The authors stress the need for neuroimaging studies in children younger than 4 years of age who have headache, especially if accompanied by vomiting, even if the neurologic exam is normal. (Straussberg R, Amir J. Headaches in children younger than 7 years: are they really benign? Arch Neurol Feb 1993; 50: 130 [Letter to the Editor]).

COMMENT. In response, Shinnar S and Chu ML emphasize that a presenting complaint of headache, even in young children, is generally associated with a benign clinical syndrome, and a neuroimaging study is not always necessary or advisable. The heavy sedation required for the MRI in this age group and risks of an adverse reaction to contrast medium with CT must be weighed against the benefits of the study. They agree with Honig PJ and Charney E (AJDC 1982; 136: 121) that headache as the sole manifestation of brain tumor is very uncommon in young children.

Headache in young children is not only a problem in evaluation but also in recognition as a significant isolated symptom. Clinical acumen and careful judgement are required in decisions, 1) to advise a neurologic consultation, and 2) to order sophisticated or invasive tests. The pediatric neurologist usually has the benefit of a pediatrician's knowledge of the child and family and his decision to seek a second opinion. Notwithstanding the relatively rare occurrence of cerebral tumor in children who present with headache, uncomplicated by some other manifestation, the pediatric neurologist's first duty is to exclude the more serious diagnoses. The value of the electro-encephalogram as an important preliminary test in the diagnosis and localization of intracranial tumors of children should not be forgotten. (Millichap JG, Backus RE et al. Neurology May 1962; 12: 329).

SEIZURE DISORDERS

TONIC CLONIC STATUS EPILEPTICUS

The phases of status epilepticus and management with anticonvulsant drugs are reviewed from the Institute of Neurology, National Hospital, Queen Square, London. In phase I, seizure activity greatly increases cerebral metabolism, but physiological mechanisms, including increased cerebral blood flow and maintenance of glucose supply to the brain, are compensatory. In phase 2, the compensatory mechanisms begin to fail. Cerebral blood flow becomes dependent on systemic blood pressure which falls due to autonomic and cardiorespiratory changes and drug treatment. The high metabolic demands of the epileptic cerebral tissue cannot be met and ischemic or metabolic damage ensues. Drug treatment, administered parenterally, is also divided into stages: 1) and 2) premonitory and early status; diazepam or other lipid-soluble, rapidly-acting, but short-duration anticonvulsant; 3) established status; phenytoin is a drug of first choice, highly effective, and long acting, often administered with diazepam. Phenobarbitone is also a drug of choice, but should not be used in a solution containing other drugs, as precipitation may occur. Numerous second-line treatment options are discussed; 4) refractory status; thiopentone is traditional in Europe; propofol, a non-barbiturate, is