

involving few controlled studies with selected patients. (see Progress in Pediatric Neurology II, 1994, pp 516-19, for other articles on diet and behavior).

ASPERGER SYNDROME AND AUTISM COMPARED

The validity and neuropsychological characterization of Asperger syndrome (AS) was investigated by comparison with Higher-Functioning Autism (HFA) (ie autism associated with overall normal intelligence) in 73 potential subjects recruited from a consecutive case series seen at the Developmental Disabilities Clinic, Child Study Center, Yale University School of Medicine, New Haven, CT. A full scale IQ >70 and a diagnosis of AS or autism according to ICD-10 research criteria were required for inclusion. The sample selected included 21 with AS and 19 with HFA. The AS group had a higher Verbal IQ and lower Performance IQ in comparison with the HFA group. There was a significant interaction between clinical diagnosis and IQ type. A high degree of concordance between AS and the condition of Nonverbal Learning Disabilities (NLD) was observed when overlap between psychiatric diagnosis (ie AS/HFA) and neuropsychological characterization (ie NLD assets and deficits) was examined. The NLD profile was an adequate neuropsychological model for individuals with AS but not for HFA. The AS and HFA groups differed significantly in 11 neuropsychological areas. (Klin A et al. Validity and neuropsychological characterization of Asperger syndrome: convergence with nonverbal learning disabilities syndrome. J Child Psychol Psychiat Oct 1995;36:1127-1140). (Reprints: Ami Klin, Child Study Center, Yale University School of Medicine, 230 South Frontage Road, New Haven CT 06520).

COMMENT. The neuropsychological profile obtained for children with Asperger syndrome (AS) coincided with that of the nonverbal learning disabilities syndrome (NLD) and differed from patients with higher-functioning autism. The defining criteria for NLD included assets in auditory perception and memory, vocabulary, and spelling, and deficits in motor skills, visual-motor integration, visual-spatial perception, visual memory, verbal content, reading comprehension, arithmetic, and social and emotional competence. The authors suggest that intervention strategies for AS should differ from those for autism, directly addressing specific neuropsychological deficits and building on neuropsychological assets, an approach found useful in individuals with nonverbal learning disabilities syndrome.

BRAIN TUMORS

SIGNS OF BRAIN TUMORS IN INFANTS

The presenting symptoms and signs of intracranial tumors diagnosed before the age of 2 years in 21 children treated at the University Hospital of Wales are reported from the Department of Child Health, Cardiff, UK. Nine of the tumors were supratentorial and 12 were infratentorial. The commonest tumor types were astrocytoma in 5, ependymoma 4, and medulloblastoma in 4. The interval between onset of symptoms and diagnosis ranged from less than 1 day to 7 months. Nine had symptoms for at least 3 months before diagnosis. CT or MRI and biopsies were performed in all cases. The commonest presenting symptoms were vomiting in 9, and unsteadiness in 8. The commonest presenting sign was enlarged head circumference in 16. Meningitis was

suspected initially and a spinal tap was performed before neuroimaging in 5 of the cases with raised intracranial pressure. Only one had neck stiffness. One received antituberculous treatment before a diagnostic CT was prompted by a rapidly deteriorating state. Multiple diagnoses were considered other than tumor and the significance of the head enlargement was not recognized in cases diagnosed late. (Gordon GS, Wallace SJ, Neal JW. Intracranial tumours during the first two years of life: presenting features. Arch Dis Child 1995;73:345-347). (Respond: Dr Wallace, University Hospital of Wales, Heath Park, Cardiff CF4 4XW, Wales, UK).

COMMENT. The diagnosis of intracranial tumor presenting in infancy may be difficult. A high index of suspicion is advisable in infants presenting with vomiting, unsteadiness, and enlarged head circumference. CT or MRI should precede consideration of spinal tap in infants with the above presenting features, especially if the diagnosis of meningitis is clinically indefinite. Not only is a spinal tap hazardous in the presence of raised intracranial pressure but a CSF pleocytosis and elevated protein, frequently found with tumors, may be misleading and lead to incorrect treatment and delay. Seizures are an uncommon presenting symptom in this age group of brain tumor patients whereas in children of all ages, seizures occur in 17% of cases, especially with supratentorial tumors. (Backus RE, Millichap JG. Pediatrics June 1962;29:978-984). See Progress in Pediatric Neurology II, 1994, pp344-5.

SEIZURE DISORDERS

EPILEPSY AND NON-EPILEPTIC EVENTS IN THE FIRST YEAR

The natural history of non-epileptic paroxysmal events (NEPE) in the first year of life was investigated in 22 babies referred for evaluation of suspected epileptic seizures at the Children's Medical Centre of Israel, Petah Tiqva, Israel. Of 9 diagnosed with epilepsy, 4 had infantile spasms and hypsarrhythmia, 2 had focal seizures and focal spikes, 2 had generalized seizures and diffuse spikes, and 1 had benign myoclonic epilepsy with EEG spike and wave. NEPEs in 13 consisted of the following movement patterns: 1) episodes of rapid eye blinking; 2) episodes of side to side head shaking; 3) body posturing and stretching; 4) masturbation-like activity; and 5) recurrent head flexion. Interictal EEGs were normal. NEPEs continued for periods of 2 weeks to 7 months and then resolved without antiepileptic treatment. Development was normal without relapse during follow up periods of 28 to 38 months. (Shuper A, Mimouni M. Problems of differentiation between epilepsy and non-epileptic paroxysmal events in the first year of life. Arch Dis Child 1995;73:342-344). (Respond: Dr Shuper, Children's Medical Centre of Israel, Beilinson Medical Campus, Petah Tiqva 49202, Israel).

COMMENT. In this study, almost 60% of infants referred for suspected epilepsy were presumed to have non-epileptic paroxysmal events that resolved relatively quickly without treatment. A maturational phenomenon was postulated. Prolonged EEG monitoring may have uncovered evidence of seizure discharges in some, but relatively long follow up without relapse was supportive of the NEPE diagnosis. The differential diagnosis includes benign myoclonus of early infancy, as described by Lombroso and Fejerman.