the 10 patients in the Canadian study had co-morbidities, 2 with ADHD, but results were analysed separately and comorbidy was not considered responsible for the findings. A medication effect, possibly involved in 6 patients, was also excluded. It is noteworthy that direction errors, normal in this TS study, were only abnormal in the TS+ADHD group of the Hopkins study and not in the TS-only group.

Deficient inhibition as a marker for familial ADHD subgroup has been proposed at the Hospital for Sick Children, Toronto (Crosbie J, Schachar R. Am J Psychiatry November 2001;158:1884-1890). Family history of ADHD and risk factors were compared in 54 ADHD children having poor or good inhibition (based on stop-signal paradigm performance) and 26 healthy controls. ADHD was significantly more prevalent in families of ADHD children exhibiting poor inhibition (48%) than in those with good inhibition (18.5%) or in controls (7.7%). Neurobiological and psychosocial risk factors were not different in the 3 groups. Cognitive measures of inhibition may act as phenotype markers for genetic analyses of ADHD. Latent-class subtypes of ADHD (Neuman RJ et al. 1999) are independently transmitted in families and should be more appropriate targets than DSM-IV subtypes for molecular genetic studies of ADHD, according to Todd RD et al (Am J Psychiatry Nov 2001;158:1891-1898).

NEOPLASTIC DISORDERS

PEDIATRIC SPINAL TUMORS

The clinical outcome and surgical treatment of 34 pediatric spinal tumors seen over an 18-year period (1981-1999) were analysed in a retrospective study at the Neurosurgical University Hospital of Frankfurt am Main, Germany. Tumor types and histology included the following: *Intramedullary* 5 (ependymoma, astrocytoma, hemangioblastoma): *Intradural, extramedullary* 6 (neurinoma, neurofibroma, medulloblastoma metastasis); *Extramedullary, extradural* 3 (neurinoma, ganglioneuroma); *Extradural* 6 (histiocytoma, neurinoma, angiofibroma, aneurysmal bone cyst); *Extradural, paravertebral* 14 (chordoma, primitive neuroectodermal, neuroblastoma, neurofibroma, Ewing"s sarcoma, aneurysmal bone cyst). Neurinomas and neurofibromas predominated in older children and neuroblastomas or primitive neuroectodermal tumors in younger age groups. Ependymomas and astrocytomas were the most frequent intramedullary tumors. Extradural tumors were more heterogeneous. Pain was the most frequent symptom, occurring in 67% of cases. Weakness of the extremities was the most common sign, elicited in 25 cases. Sensory impairment occurred in 22 and bladder dysfunction in 7. Malignant tumors had a shorter duration of symptoms and higher incidence of neurologic deficits than benign tumors. Following surgical decompression of the spinal cord, the neurologic status improved, with good functional recovery in 23 patients while 5 had deteriorated at follow-up. Relapse occurred in 12 cases (histiocytomas, chordomas, medulloblastoma, and von Hippel-Lindau cervical hemangioblastoma). Chemotherapy was used postoperatively in 7 cases, radiation therapy in 6, and combined therapy in 4. One case of aneurysmal bone cyst diagnosed by biopsy was cured by radiation therapy alone. At follow-up, average 2 years, 22 children could walk without aids, 7 with aids, and 2 (histiocytomas) were non-ambulatory and plegic. (Schick U, Marquardt G. Pediatric spinal tumors. Pediatr Neurosurg Sept 2001;35:120-127). (Respond: Dt Uta Schick, Clinic of Neurological Surgery, University of Leipzig, Johannisallee 34, D-04103 Leipzig, Germany).

COMMENT. The majority of spinal tumors require surgical decompression, and resection when possible. Aneurysmal bone cysts may respond to radiation.