<u>COMMENT</u>. Radiation-induced tumors of the central nervous system are recognized as a consequence of combined treatments for leukemia chemotherapy and irradiation to the head. Therapeutic doses of radiation for childhood leukemia are higher than those used for the patients with tinea capitis in Israel and the relative risks are undetermined.

## BEHAVIOR AND LEARNING DISABILITIES

## ATTENTION DEFICIT DISORDER

The go-no-go paradigm was used in the evaluation of children with attention deficit disorder (ADD) at the Dept of Pediatrics, Division of Neurology and Evaluation Center for Learning, Northwestern Univ Medical School, Evanston Hospital, Evanston, IL. The paradigm consisted of the taped presentation of 2 trials of 10 stimuli; 5 go signals (1 tap) to which the children were expected to respond by raising and lowering their index finger, and 5 no-go signals to which they should not respond. Commissions errors suggest inattention. Children with ADD (44 boys) made more total errors than did 32 control subjects (p<.03). Nonhyperactive (ADDH) subjects made more commission errors stan controls initially but improved with practice. Hyperactive ADD subjects (ADH) made the same number of early commission errors as controls but failed to improve with practice. Omission errors were highest in the ADDH group. The paradigm provided an objective masure of inattention and impulsivity and a distinction between hyperactive and nonhyperactive children with ADD.: (Trommer Bl et al. The go-no-go paradigm in attention deficit disorder. Ann Neurol Nov 1988;24:610-614).

<u>COMMENT.</u> Errors of commission are more common than errors of omission in children with ADD which suggests that impulsivity is more easily demonstrated than inattention. The DSM-III "impulsivity" criteria include inability to wait in turn at games, calling out in class, and shifting activities. The go-no-go paradigm offers a test for impulsivity at a cognitive level, the inability to give the most correct answer in a multiple choice setting, and supplements reports of behavioral manifestations of ADD.

## FLOATING-HARBOR SYNDROME

Six unrelated children with a unique association of short stature, dysmorphic features, and speech delay are reported from the Harbor/Univ of California at Los Angeles Med Center, the Kennedy Memorial Hospital, Boston, the Beilinson Med Center, the District General Hospital, Stanford, England, and the Cedars-Sinai Med Cntr, Univ of California, LA. Two were French-Canadian, 2 British, 1 Iranian, and 1 Israeli ancestry. All had growth retardation during the first year, delayed bone age, severe speech delay and normal or only mildly retarded intelligence. The strikingly similar facial features consisted of a large long nose, thick lips, broad mouth, deep-set eyes and long eyelashes. Growth hormone stimulation, somatomedin-C levels, thyroid, karyotype, and dermatoglyphics were normal. (Robinson P et al. A unique association of short stature, dysmorphic features, and speech impairment (Floating-Harbor syndrome). J. Pediat Oct 1988;113:703-706).

<u>COMMENT</u>. This unique syndrome was named after the hospitals where the first 2 patients were recognized (Pelletier and Feingold and Leisti et al. In: Bergsma D. ed. <u>Syndrome identification</u>: Vol 1, No 1 and Vol 2, No. 1. White Plains, NY:Nat Foundation-March of Dimes, 1973-74). The differential diagnosis includes the Rubinstein-Taybi syndrome, Russell-Silver syndrome, Williams and Noonan syndromes, and Dubowitz and Seckel syndromes.

## AUTISTIC SPECTRUM DISORDER

In the second part of an excellent review of disorders of higher cerebral function, Dr. Isabelle Rapin, at the Albert Einstein College of Med, Bronx, NY, outlines the evaluation and management of preschool children with autism and inadequate communication skills. The core symptoms of the autistic spectrum disorder are listed as follows: 1) impaired socialization, 2) inadequately modulated affect, 3) language disorder always affecting communicative skills and comprehension, and 4) abnormal play with a narrow range of interests. There is a spectrum of autistic disorders, ranging from mute, withdrawn individuals with motor stereotypes to highly verbose persons with perseveration, insistence of routines and sameness, and overspecialized interests such as dictionaries, train schedules, and calendars. Autism usually denotes a static condition. The most efficient way to evaluate communication skills is to observe the child at play, to talk to him, and to ask questions about his play. Children who manipulate toys rather than play with them, who talk to themselves, or who are echolalic or perseverative are almost certainly abnormal. Hearing tests, speech and language evaluation, neuropysychological tests, and consultations with child neurologist and psychiatrist may be required before referral to a preschool specialized program. (Rapin 1. Disorders of higher cerebral function in preschool children. AJDC Nov 1988;142:1178-1182).

<u>COMMENT.</u> Cerebellar hypoplasia and autism is discussed in the correspondence section of <u>N Engl J Med</u> Oct 27, 1988;<u>319</u>:1152-54). Patients with autism, mean age 20 yr, were reported to have a decrease in the size of cerebellar vermal lobules VI and VII on MRI scans. These findings were not confirmed in one study of 15 patients with autism (mean age 11.5 years) compared to 15 normal matched controls, but they were replicated in a study of men with fragile X syndrome, a condition sometimes associated with autism. Investigations that include children as well as adults would help to specify whether the observed cerebellar changes or MRI are actually hypoplasia on atrophy occurring postnatally.