

levels correlated directly with hyperactivity. (Rovet J, Alvarez M. Thyroid hormone and attention in school-age children with congenital hypothyroidism. J Child Psychol Psychiat July 1996;37:579-585). Reprints: Dr Joanne Rovet, Psychology Department, The Hospital for Sick Children, 555 University Ave, Toronto, Ontario, Canada M5G 1X8).

COMMENT. Higher levels of T4 and TSH, consistent with a resistance to thyroid hormone, are associated with poorer attention and less hyperactive behavior in children with congenital hypothyroidism. Children with CH should be closely monitored to maintain levels of T4 and TSH within the normal range and to avoid elevations of hormone that could impede attention. Thyroxine and thyrotropin have unique effects on specific aspects of attention and behavior.

The incidence of ADHD is 10 times higher in children with thyroid hormone resistance than in those with normal thyroid function. (Hauser P et al. N Engl J Med 1993;328:997). See Progress in Pediatric Neurology II, 1994, pp 177-8. Studies of thyroid function should be included more frequently in the clinical evaluation of children with ADHD.

THYROXINE-INDUCED ABSENCES IN JME

A patient with juvenile myoclonic epilepsy (JME), manifested as absences at age 10 and myoclonic jerking and generalized tonic clonic seizures at age 15, was treated successfully with primidone at the King Fahad National Guard Hospital, Riyadh, Saudi Arabia. Absence seizures were provoked by thyroxine 50 mcg daily prescribed at age 35 for a simple goitre associated with normal thyroid function tests. Loss of concentration lasting a few seconds was associated with frequent discharges of sharp, spike, multispike, and slow wave complexes on the EEG. The thyroid levels were slightly elevated compared to initial tests. Absences stopped and the EEG returned to normal after thyroxine was discontinued. (Obeid T et al. Thyroxine exacerbates absence seizures in juvenile myoclonic epilepsy. Neurology Aug 1996;47:605-606). (Respond: Dr Tahir Obeid, Division of Neurology, King Fahad National Guard Hospital, PO Box 22490, Riyadh 11426 Saudi Arabia).

COMMENT. When thyroid hormone is administered in patients with epilepsy, the dose should be monitored carefully and an EEG obtained to examine for subclinical absence seizures requiring additional antiepileptic medication.

HYPOTHYROIDISM AND CHROMOSOME 21 DELETION

A 12-year-old mentally retarded girl with a large deletion of the long arm of chromosome 21 and congenital hypothyroidism is reported from the Department of Clinical Genetics and Pediatrics, University Hospital, Uppsala, Sweden. Despite the large chromosome deletion, the degree of mental retardation was mild and severe manifestations of Down syndrome were absent. The proximal part of the long arm of chromosome 21 does not include the genes responsible for severe clinical effects seen in Down syndrome. Congenital hypothyroidism in this patient might indicate the importance of genes on chromosome 21 for thyroid function. (Ahlbom BE, Sidenvall R, Anneren G. Deletion of chromosome 21 in a girl with congenital hypothyroidism and mild mental retardation. Am J Med Genet Aug 1996;64:501-505). (Reprints: Dr G Anneren, Department of Clinical Genetics and Pediatrics, University Hospital, S-751 85 Uppsala, Sweden).