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ATTENTION DEFICIT DISORDERS

ADHD AND THYROID HORMONE RESISTANCE

The presence and severity of attention deficit-hyperactivity disorder (ADHD) in 104 members of 18 families with a history of generalized resistance to thyroid hormone were evaluated at the National Institutes of Health, Bethesda, MD, using structured interviews. Of 49 affected with a mutant thyroid receptor gene and reduced responsiveness to thyroid hormone and 55 unaffected family members, 52 were adults and 52 were children. Among adults, ADHD was present in 11 of 22 (50%) with thyroid resistance and in 2 of 30 (7%) without. Among children, 19 of 27 (70%) resistant to thyroid hormone and 5 of 25 (20%) nonresistant subjects met the criteria for ADHD. The likelihood of having ADHD was 15 times higher for adults with generalized resistance to thyroid hormone than for unaffected family members, and 10 times higher for affected children. Male subjects, both affected and unaffected, had a risk of ADHD three times higher than females. (Hauser P et al. Attention deficit-hyperactivity disorder in people with generalized resistance to thyroid hormone. *N Engl J Med* April 8, 1993; **328**: 997-1001). (Reprints: Dr Hauser, Molecular and Cellular Endocrinology Branch, Nat Inst of Diabetes, NIH, Bldg 10, Rm 8D-14, 9000 Rockville Pike, Bethesda, MD 20892).

COMMENT. The criteria for diagnosis of thyroid hormone resistance were as follows: 1) normal or elevated serum thyrotropin concentrations, 2) elevated serum T₃ and T₄, and 3) resistance of peripheral tissues to thyroid. Although this genetic thyroid disorder may be uncommon in ADHD, studies of thyroid function should be included more frequently in the clinical evaluation of hyperactive children.

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