Familial Aggregation Study of Hashimoto’s Thyroiditis

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ABSTRACT Data for the present study were collected at the Institute of Nuclear Medicine and Allied Sciences. Unit of study was the family and all family members of a patient with Hashimoto’s thyroiditis were included. Patients were school children between 5 to 16 years. Using a radioimmunoassay method, which depends on the interaction between antibody and radiolabeled autoantigen, this study on the assessment of the inheritance patterns of TG and MC autoantibodies was carried out on 20 families (87 individuals) with Hashimoto’s thyroiditis. In families where both parents were normal the prevalence of TG antibody was 11.1 percent in sons and 45.45 percent in daughters but increased to 15.38 percent and 62.22 percent, respectively if either of the parents had this antibody. The prevalence of MC antibody was zero percent in sons and 54.54 percent in daughters if both parents were normal but increased to 7.69 percent and 81.25 percent in daughters, respectively if either of the parents had this antibody. The present study clearly shows the aggregation of antithyroglobulin antibodies and antimicrosomal antibodies in families studied.