Polyendocrinopathy in children, adolescents, and young adults with type 1 diabetes: a multicenter analysis of 28,671 patients from the German/Austrian DPV-Wiss database.

OBJECTIVE: To investigate diabetes-specific autoantibodies and additional autoimmune phenomena in a large cohort of young patients with type 1 diabetes. RESEARCH DESIGN AND METHODS: Data from 28,671 patients<30 years with type 1 diabetes from 242 specialized centers in Germany and Austria were analyzed. RESULTS: At least one beta-cell antibody was present in 81.6% of patients. beta-cell-Ab-negative patients were significantly younger at diabetes onset (P< 0.0001). A total of 19.6% had positive thyroid antibodies with female predominance (62%, P< 0.0001). Antibodies to tissue transglutaminase were present in 10.7%, with a significantly longer duration of diabetes (P< 0.0001). Parietal cell antibodies were found in 283 patients, associated with older age (P< 0.001), and adrenal antibodies were present in 94 patients. In 575 patients, at least three different autoimmune phenomena were present. CONCLUSIONS: Thyroid autoimmunity and antibodies suggestive for celiac disease are the most prevalent additional immune phenomena in type 1 diabetes. Parietal/adrenal antibodies are rare.