COMMENTS AND RESPONSES

Thyroid Autoimmunity at Onset of Type 1 Diabetes as a Predictor of Thyroid Dysfunction

Response to Warren and Frier

We appreciate Warren and Frier's (1) interest in our article (2). Unfortunately, we cannot calculate the predictive value of thyroid stimulating hormone (TSH) level at diabetes onset in our cohort because this determination is not available for all patients. The fact that the high-normal TSH level was more predictive of thyroid dysfunction than thyroid autoantibodies in the study by Warren et al. (3) is surprising, since thyroid dysfunctions are mainly related to autoimmune thyroid disease, particularly in type 1 diabetes. In addition, serum thyroid antibodies can precede this dysfunction for many years and also predict a higher risk of developing overt dysfunction in patients with subclinical hypothyroidism. Furthermore, the predictive value of thyroperoxidase (TPO) antibodies in our population of new-onset type 1 diabetic patients (95% sensitivity and 96% specificity) was higher than that reported by Warren et al. using TSH levels, supporting the usefulness of TPO autoantibodies for the prediction of thyroid dysfunction in type 1 diabetes. Most of the patients in the study by Warren et al. had type 2 diabetes; it is well known that the prevalence of thyroid disease in this population is lower than in type 1 diabetic patients, and TSH elevations may frequently be due to conditions other than autoimmunity. We consider that these factors could explain the low predictive value of thyroid autoantibodies in the population studied by Warren et al. Since differences between these two populations are likely the cause of the apparently divergent results, a reanalysis based on the type of diabetes could perhaps clarify this hypothesis.

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