Lifestyle Intervention Reduces TPO Antibody Level in Euthyroid Patients: A Retrospective Cohort Study

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OBJECTIVES

To investigate the impact of lifestyle intervention on elevated serum thyroid peroxidase antibody (TPO) levels in outpatients with normal thyroid function.

METHODS

A retrospective cohort study was performed to observe and evaluate euthyroid patients with excessive TPO antibodies that presented to the authors' hospital between March 2013 and October 2014 for routine medical examinations. The subjects were randomly divided into the lifestyle intervention group and the control group. Lifestyle interventions, including diet improvement and adequate sleep, were instituted immediately following the medical examination for 12–24 weeks. Both groups had patients taking either selenium supplements or Chinese herbal medicines. The difference between the two groups in TPO antibody level was compared after lifestyle intervention.

RESULTS

The TPO antibody level decreased by 30% in the intervention group and only 5% in the control group ($P < .05$).

CONCLUSIONS

Increased TPO antibody level is often related to autoimmune thyroid disorders and inflammation, including conditions such as toxic goiter or autoimmune thyroiditis. The present cohort study demonstrated that lifestyle intervention can effectively improve early-stage thyroid disorders.

References