

Chronic subclinical hyperthyroidism does not reduce quality of life

The background of the study. Patients with subclinical hyperthyroidism (low serum thyrotropin [TSH] and normal serum thyroxine [T4] concentrations) may or may not have symptoms. In this study, quality of life and symptoms were evaluated in patients who had subclinical hyperthyroidism for many years before and after the restoration of euthyroidism.

How the study was done. The study subjects were 24 patients with thyroid carcinoma who had subclinical hyperthyroidism for 10 to 17 years due to therapy with T4 in doses sufficient to reduce serum TSH concentrations to below normal (<0.4 mU/L). None had persistent or recurrent carcinoma.

The patients were randomly assigned to continue T4 (low-serum-TSH group) or to take a lower dose, so that their serum TSH concentrations increased to normal (normal-serum-TSH group). At base line and after six months, the patients completed five questionnaires and serum TSH was measured. The questionnaires included questions about physical and mental well-being and limitations, physical and mental fatigue, motivation, anxiety and depression, and symptoms of hyperthyroidism.

The results of the study. Eight women and four men were assigned to each group. Their scores on the questionnaires, including the hyperthyroid symptom scale, were normal. At six months, the mean daily dose of T4 had not changed in the high-serum-TSH group, but was lower in the normal-serum-TSH group (129 vs. 173 µg). The median base-line and 6-month serum TSH concentrations were 0.06 and 0.04 mU/L, respectively, in the low-serum-TSH group and 0.01 and 2.7 mU/L, respectively, in the normal-serum-TSH group.

During the 6-month study period, there were no changes in the scores for any of the questionnaires in the low-serum-TSH group. In the normal-serum-TSH group, the score for physical limitations was slightly lower (more limitation), and motivation increased. There was no change in the hyperthyroid symptom score or any of the other scores.

The conclusions of the study. Patients with long-standing subclinical hyperthyroidism have few if any symptoms and no decrease in quality of life. The findings do not change when the T4 dose is reduced and they are euthyroid.