Melatonin drug use in complex treatment of hypothyroidism manifest

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Aim: The aim of the study was to evaluate the clinical efficacy of melatonin in patients with hypothyroidism.

Materials and methods: In study were taken 51 patients from 25 to 63 years to manifest hypothyroidism (on a background of autoimmune thyroiditis), with anxiety-depressive syndrome and sleep disturbance. Thyroid hormones were determined by ELISA (Vector-Best Russia) Anxiety-depressive syndrome in patients with hypothyroidism were analyzed on hospital Anxiety and Depression Scale HADS. Patients were divided into 2 groups. First group with manifest hypothyroidism (25 patients) received standard replacement therapy with L-thyroxine and symptomatic therapy for 1 month. Second group with manifest hypothyroidism (26 patients) along with L-thyroxine and symptomatic therapy additionally received melatonin (15 mg/night) Statistical analysis was done by SPSS, to analyze the reliability of the Student T criteria.

Results: Thyroid hormones levels in the blood of patients with hypothyroidism group 1 and 2 before treatment showed no differences. With combination therapy of melatonin in group 2, serum TSH fell from the baseline to 82.2±1.5%, the level of free serum T4 increased from baseline to 56.8±2.4%, which differ from that of patients of group 1 after treatment. After the treatment, noted that in both groups there is significant reduction in anxiety, P<0.05, especially subclinical anxiety (P<0.05). Found that only after treatment of melatonin in the treatment of hypothyroidism is significantly reduced depressive states with 10.9±0.9 points to 6.9±0.5 points (P<0.05), with significantly reduced subclinical depression.

Conclusion: The inclusion of melatonin in the standard therapy for symptomatic hypothyroidism showed that the drug can affect the pituitary-thyroid system, removing anxiety and depression.