Pankiv V.I.
Ukrainian Scientific and Practical Centre for Endocrine Surgery,
Transplantation of Endocrine Organs and Tissues of MOH of Ukraine, Kyiv, Ukraine

COMPARATIVE ANALYSIS OF ESPA-CARB EFFICACY IN PATIENTS WITH'HYPERTHYROIDISM

Summary. The article discusses approaches to conservative treatment in patients with diffuse toxic goiter (DTG). The purpose of research — evaluation of coverage, therapeutic efficacy and tolerability of carbimazole (Espa-Carb) compared with thiamazolum (Mercazolil-Zdorovye) in patients with hyperthyroidism.

Materials and Methods. We observed 55 patients with DTG, divided into two groups. The first group (n = 30) received carbimazole (Espa-Carb), the second group (n = 25) — thiamazolum (Mercazolil-Zdorovye). The patient groups did not differ in age, sex, size of thyroid gland and duration of thyrotoxicosis.

Results. Analysis of the findings shows that the first group of patients has a more significant effect of treatment compared with patients of the second group. Average thyroid volume was significantly reduced only in the first group. At average, thyroid volume decreased from 37.2 ± 3.1 cm^3 to 29.3 + 2.9 cm^3 ($p < 0.05$). In the second group we observed a tendency to decrease, but without statistical significance (from 36.4 + 3.9 cm^3 to 32.4 ± 2.8 cm^3 ($p > 0.05$). In patients from the first group with DTG, a significant increase in TSH (from 0.027 ± 0.009 mIU/l to 0.37 ± 0.16 mIU/l; $p < 0.05$) and a significant decrease in the levels fT_4 (from 29.3 + 2.3 nmol/l to 18.4 ± 1.8 nmol/l; $p < 0.05$) and fT_3 (from 7.8 + 1.6 nmol/l to 3.2 ± 1.1 nmol/l; $p < 0.05$) were detected. At this, TSH increase in patients of the second group did not reach a statistical significance ($p > 0.05$). At the same time, the second group of patients reported a significant decrease in the levels fT_4 (from 31.4 ± 2.1 nmol/l to 21.7 ± 1.8 nmol/l; $p < 0.05$) and fT_3 (from 8.2 ± 1.4 nmol/l to 3.7 ± 1.2 nmol/l, $p < 0.05$). Reduced autoimmune aggression manifested by a decrease in concentration of antibodies to rTSH which in patients of the first group became statistically significant. If the average daily dose of Espa-Carb and Mercazolil-Zdorovye at the baseline did not differ in the examined groups of patients, then after 6 months of treatment, the mean dose of carbimazole in the first group was 15.8 + 1.7 mg, and the second group — 19.2 ± 2.1 mg ($p > 0.05$). Side effects weren't observed for six months during the treatment of patients in both groups. Normalization of peripheral hormones (fT_4 and fT_3) in 90 days of observation has been achieved in 96.2 % of patients in the first group and 74.1 % — in the second group. The number of patients who achieved normal TSH levels was significantly higher in the first group (93.3 % vs. 76 %).

Conclusions. We determined higher efficiency of carbimazole compared to thiamazolum that manifested by more rapid achievement of clinical effect and compensation thyrotoxicosis, significant decrease of thyroid volume, the level of antibodies to the TSH receptor. Using carbimazole reduces thyreostatics daily dose in patients with DTG, which reduces the risk of complications of therapy. When using carbimazole for six months in patients with DTG, cases of intolerance or other adverse effects weren't reported.

Key words: *thyrotoxicosis, carbimazole, thiamazole.*