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## AUTOIMMUNE THYROIDITIS IN PATIENTS WITH CHRONIC HEPATITIS C

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**Introduction.** Viral hepatitis is an urgent problem of modern medicine, but they are characterized not only by liver damage and are a systemic disease that occurs with extrahepatic manifestations [1,2]. Despite the inconsistency of the literature on the relationship between HCV infection and autoimmune thyroiditis, the prevailing view is that HCV may play a role in the development of autoimmune thyroiditis. The incidence of autoimmune thyroiditis (AIT) ranges from 2.8% to 43% in various studies [3]. In most of the subjects (32-43.5%) are diagnostic levels of antithyroid antibodies [4]. The literature describes both direct thyroid damage by the virus and autoimmune-mediated [5,6]. To date, a single prognostic criterion for thyroid damage has not been developed.

**Goal.** To compare the functional status of the thyroid gland in patients with chronic viral hepatitis C in combination with autoimmune thyroiditis and without it.

**Materials and methods of research.** The study involved 68 patients, who were divided into three groups: Group I with autoimmune thyroiditis (17), including 6 men and 11 women, the mean age was  $47.0 \pm 5.0$  years; Group II - 26 people (11 men and 15 women) with AIT in combination with CHC, mean age -  $38.20 \pm 1.95$  years; Group III - 25 patients (11 men and 14 women) with CHC, mean age  $36.70 \pm 6.43$  years. All patients underwent a study to determine the level of serum thyroid hormones - TSH, T3, T4 and antibodies to thyroperoxidase (anti-TPO). The diagnosis of CHC was confirmed by PCR with HCV RNA, ELISA, study of biochemical parameters of liver function in the blood (ALT, AST, LF, GGTP, proteinograms). Patients did not receive etiotropic therapy for viral hepatitis. Student's criterion ( $p < 0.05$ ) was used to assess the significance of differences in the compared data.

**Results.** In patients of group I, the levels of T3 ( $2.28 \pm 1.41$  nmol / l), T4 ( $113.5 \pm 6.81$  nmol / l), TSH ( $1.89 \pm 1.08$  honey / l) were within normal limits. values, and the level of AtTPO ( $13.62 \pm 2.56$  IU / ml) slightly exceeded the reference values. In patients of group II levels of T3 ( $2.29 \pm 1.57$  nmol / l), T4 ( $111.75 \pm 3.19$  nmol / l), TSH ( $1.74 \pm 1.34$  honey / l) were also within normal values. The tendency to increase the level of AtTPO in comparison with patients of group I was found in 16 (61.5%) patients of group II (AtTPO  $16.03 \pm 1.68$  IU / ml) and in 15 (60%) patients of group III ( $15.95 \pm 2.47$  IU / ml). In 5 (29.4%) patients of group I there was a decrease in T3

total. against the background of a slight increase in TSH. In 10 (38.4%) patients of group II there was an increase in TSH, a decrease in T3zag., In 5 patients - T4vil. In 7 (28,%) patients of group III there was an increase in TSH, a decrease in T3zag and in 2 patients - T4vil. Decreased levels of thyroid hormones in the study group of patients indicate the presence of subclinical hypothyroidism. The largest number of patients with low T3 levels is observed in group II. The results of the study show that the value of TSH is most elevated in patients of groups II and III and higher than in patients of group I, which indicates the activation of thyroid-stimulating function of the pituitary gland on the background of CHC. Significant increase in AtTPO levels in patients with AIT in combination with CHC may be due to the presence of autoimmune inflammatory process in the thyroid gland, which occurs against the background of moderate hepatitis activity, the etiological factor of which is HCV infection.

**Conclusions.** 1. In patients with CHC, occurring on the background of AIT, hypothyroidism and elevated TSH levels, indicating activation of thyroid function of the pituitary gland. 2. Concomitant CHC complicates the course of AIT. 3. Autoimmune thyroiditis on the background of viral hepatitis significantly more often occurs with subclinical.

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