diagnosed with type 2 diabetes with the level of HbAlc 9,6 $\pm$ 1,3 mmol/l. The original content of IL-6 was 7,1 $\pm$ 1,1 pg/ml at a rate of 5,2  $\pm$  0,9 pg / ml.

An increase in IL-6, which appears in the inflammation after 2-3 days from the start of the disease, associated with the synthesis of acute phase proteins by hepatocytes and the control of fibrogenesis (reduced activity). In this case, we can say that combined OA and obesity rate has practically no effect of IL-6 for being in clinical remission. Those, there is not an active inflammatory process in the liver, and the resulting changes are due to the formation of liver's steatosis background changes of lipid and carbohydrate metabolism. At the same time, changes in ultrasonic indicates gallbladder inflammation occurred with the change of physical and chemical properties of bile.

Thus, the presence of obesity in patients with OA may contribute to the formation of hepatobiliary disease that aggravate the clinical manifestations of the disease.

#### Ptushchenko N.Y.

### RISK OF INJURY HEPATOBILIARY SYSTEM IN PATIENTS WITH SUBCLINICAL AND CLINICAL HYPOTHYROIDISM IN CONJUNCTION WITH THE AUTOIMMUNE DESTRUCTION THYROID GLANDS

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The problem of autoimmune thyroiditis (AIT) is now becoming increasingly important. The etiology of this disease is controversial and multifactorial, including a set of genetic, environmental and physical factors. AIT prevalence among the adult population is 4-5 %, while in 86 % of cases the disease is diagnosed at a stage already occurring symptomatic functional disorders on the part of the thyroid gland, which requires hormone replacement therapy.

Thyroid hormones regulate the level of basic metabolism of all body cells, including hepatocytes, which certainly has an impact on their functional status. Hepatobiliary system plays an important role in the metabolism of thyroid hormones. The liver is involved in iodination thyroxine in the bloodstream and degradation of thyroid hormones and their metabolites elimination. In the pathogenesis of lesions of the hepatobiliary system in autoimmune diseases of the thyroid gland leading role played by dyslipidemia. Thyroid hormones have a number of effects on the regulation of lipid metabolism. It has been established that 1 to 11 % of patients with dyslipidemia have subclinical hypothyroidism. Cholesterol and its fractions largely reflects the peculiarities of hormonal levels in different functional states of the thyroid gland as the result of her autoimmune destruction.

Aim - to establish the frequency and risk of the hepatobiliary system's injury in patients with hypothyroidism, occurs on the background of AIT.

Materials and methods. We analyzed 42 case histories of patients with AIT in age from 32 to 54 years. Gender distribution was as follows: among the surveyed women was 52.8 % and 47.2 % men. In view of the functional state of the thyroid, patients were divided into 2 groups: 22 patients had hypothyroidism, 20 - euthyroid state. Patients in both groups were matched for age (mean age  $38.4 \pm 2.6$  years old and  $35.8 \pm 1.5$  years, respectively). Diagnosis AIT was established in accordance with the criteria for this nosology, presented in the Russian Association of Clinical Endocrinologists guidelines for diagnosis and treatment of autoimmune thyroiditis in adults (2003). Thyroid function was assessed by the level of thyroid stimulating hormone in blood immunochemical methods, reagent kit "DAS SpectroMed" serum -(Moldova). Lipid metabolism was assessed using an enzymatic method using standard kits. At the stage of functional diagnostics status hepatobiliary tract using ultrasound of the abdominal cavity. Test results were obtained in a survey of 20 healthy subjects of similar age and sex.

Results. Isolation of the two groups of patients was determined by indicators of the level of TSH in serum: from 22 persons group (52.4 %) were diagnosed with hypothyroidism (TSH 8,2  $\pm$  1,2 mU/l); the comparison group included 20 patients (47.6%) with the AIT, in a state of euthyroid (TSH 2,15 $\pm$  0,3).

In the study group the average total cholesterol in the blood serum was 7,6  $\pm$  0,8 mmol / 1 (p <0,05),  $\beta$ - lipoprotein (LP) - 72  $\pm$  8 units. (p <0.05), alanine aminotransferase (ALT) - 0,56  $\pm$  0,08 mmol / 1 (p> 0.05). In the comparison group matched the average level of cholesterol - 5,3  $\pm$  0,5 mmol / 1 (p <0.05), LP - 48  $\pm$  7 units. (p <0.05) and ALT - 0,32  $\pm$  0,09 mmol / 1 (p> 0.05). Thus, in patients with hypothyroidism, hypercholesterolemia observed in 17 cases (77.3 %), dyslipidemia in 19 cases (86.4 %), elevated transaminase levels in 2 cases (9 %).

In 76.8 % of patients with subclinical and clinical hypothyroidism revealed diffuse changes in the liver's parenchyma, characterized by an increase in its borders to an average of  $1,8 \pm 0,4$  cm. In patients with euthyroid hepatomegaly was detected only in 11.6 % of cases.

A direct correlation between the level of cholesterol, LP, ALT and symptomatic hypothyroidism (r = + 0,96, r = + 0,87, r = + 0,65 relatively, p<0.05).The study found correlation between TSH levels and predictors of lesions of the hepatobiliary system (cholesterol, LP, ALT). This marked a significant difference in the values of indicators of cholesterol and LP in the study group and the control group (p <0.05). In individuals with impaired

thyroid function revealed higher levels of alanine aminotransferase compared with patients who have a form of euthyroid autoimmune's thyroiditis, but with no statistically significant difference between the indices (p > 0.05).

Conclusions.

1. Autoimmune thyroiditis is often accompanied by the hepatomegaly (in 76.8 % of cases) as a manifestation of the toxic effects of thyroid stimulating hormone in the liver's parenchyma.

2. In patients with hypothyroidism, which is complicated for autoimmune thyroiditis, there was a significant increase in the level of cholesterol and  $\beta$ -lipoproteins in the blood serum, compared with patients with preserved function of the thyroid gland.

3. In patients with autoimmune thyroiditis and primary hypothyroidism in 76.8 % of cases, an increase in the content of transferases background hepatomegaly, which may be considered as its part in the pathological process with the development of reactive hepatitis.

4. The presence of reactive hepatitis and dyslipidemia in patients with autoimmune thyroiditis causes the feasibility of additional destination of statins and hepatoprotectors plant origin.

# Shapkin V.E.

# APILAC USE IN HYPOTONIC BILIARY DYSKINESIA PATIENTS AT THE FAMILY DOCTOR PRACTICE

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Hypotonic biliary dyskinesia is common nosology in Primary Health Care. This pathology seems not very harmful, but it is the basis of such common diseases as cholelithiasis, chronic cholecystitis, some forms of chronic hepatitis. Increasing the number of hypotonic biliary dyskinesia patients says about the lack of effectiveness of conventional therapy, so it is important to elaborate new treatment. One of these innovation can be apitherapy that has already proved its effectiveness in the treatment of various types of asthenic syndrome and arterial hypotension. We are interested in royal jelly preparations that combine adequate performance and price.

The aim of this study was investigation the efficacy of dry adsorbed royal jelly produced by glands of bees ("Apilac") at hypotonic biliary dyskinesia patients. The choice of drug was determined by its adaptogenic, tonic, biostimulating effects and relatively low price.

Materials and methods. We examined hypotonic biliary dyskinesia outpatients. There are 63 patient aged from 18 to 42 years, including 48