

**Results.** In the studied patients, GI1, reflecting lymphocyte sensitization to liver microsomes, varied from 4 % to 35 % and averaged  $15.63 \pm 1.37$  %; GI2 (to n-DNA), with values ranging from 3.5 % to 28 %, was  $17.32 \pm 1.24$  %, and GI3 (to d-DNA) was  $22.02 \pm 1.27$  %, with the indicator fluctuating from 8.5 % to 38 %. At the same time, lymphocyte sensitization to liver microsomes (GI=35 %) was detected only in 1 patient (0.18 %), and to d-DNA in 2 (GI=34.5 % and 38 %, respectively), which amounted to 3.57 %. These indicators did not differ from similar values in the control group ( $p > 0.05$ ).

**Conclusions.** Thus, we were unable to establish statistically significant sensitization of peripheral blood lymphocytes to liver microsomes, n- and d-DNA based on the LAI test results in the studied patients, raising doubts about the role of these autoantigens in the development of autoimmune reactions in CHC.

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## **EFFECTS OF S-ADENOSYL-L-METHIONINE FOR THE TREATMENT OF METABOLIC-ASSOCIATED STEATOTIC LIVER DISEASE**

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**Objective** – to determine the likely effect of S-adenosyl-L-methionine (SAME) on the clinical course, liver enzymatic activity (the levels of Aspartate aminotransferase (AST), Alanine Aminotransferase (ALT), Gamma-Glutamyl Transpeptidase (GGT), Alkaline phosphatase (ALP)), Nonalcoholic steatohepatitis (NASH) activity and influence on the liver fibrosis (LF) stage in patients with metabolic dysfunction-associated steatotic liver disease (MASLD).

**Materials and methods.** The examined contingent of patients consisted of 40 patients, who were divided into the following groups: the main group – 40 patients with MASLD before SAME treatment, the comparison group – 40 patients with MASLD after treatment, the control group – 20 relatively healthy individuals. The diagnosis of MASLD was determined based on the Order of the Ministry of Health of Ukraine Unified clinical protocol for primary, secondary (specialized) medical care:

«non-alcoholic steatohepatitis», the European Association for the Study of Liver Diseases (EASL, 2024), the American Association for the Study of Liver Diseases (AASLD, 2023). The assessment of the severity of LF was carried out according to the results of transient elastography (TE) and corresponded to the values of the international METAVIR scale.

**Results.** Analysis of the results of SAME treatment in patients with MASLD demonstrated a significant reduction in such complaints as: increased fatigue, headache, general weakness, aching pain in the right hypochondrium, decreased appetite, sleep disorders and mood deterioration. After treatment, the group of studied patients reported a reduction in complaints of increased fatigue by 9 % ( $p<0.01$ ), headache by 8 % ( $p<0.05$ ), general weakness by 20 % ( $p<0.05$ ), right upper quadrant pain by 11 % ( $p<0.05$ ), sleep disturbance by 12 % ( $p<0.05$ ) and mood worsening by 22 % ( $p<0.01$ ).

After 5 months from the start of SAME therapy, a significant decrease in liver cytolysis indices was observed in patients with MASLD. Thus, the mean values of AST levels in the group of patients with comorbid pathology were reduced from  $(56.3\pm 10.2)$  IU/l to  $(37.2\pm 12.5)$  IU/l ( $p<0.01$ ). The mean values of ALT levels in the studied patients were also reduced from  $(82.3\pm 12.4)$  IU/l to  $(51.3\pm 11.8)$  IU/l ( $p<0.01$ ). The mean values of GGT against the background of the proposed treatment decreased from  $(65.0\pm 16.4)$  IU/l to  $(58.4\pm 12.5)$  IU/l ( $p<0.05$ ), and the mean values of ALP decreased from  $(186.6\pm 27.9)$  IU/l to  $(164.3\pm 17.5)$  IU/l ( $p<0.05$ ).

It was also proven that 5 months after the start of SAME use, positive dynamics were observed in the regression of NASH and liver fibrosis in the group of patients with MASLD. Thus, the number of patients in the stage of LF F1-2 decreased from 23.8 % to 15 % ( $p<0.05$ ), the number of patients in the stage of fibrosis F0-1 decreased from 26.1 % to 17 % ( $p<0.05$ ), the number of patients in the stage of NASH decreased from 23.8 % to 14 % ( $p<0.05$ ). Thus, the obtained results of the SAME treatment demonstrate the participation of this drug in the regression of the stages of MASLD.

**Conclusions.** The results of SAME therapy show the improvement of the clinical course of MASLD, liver function, and the regression of the LF stage. Therefore, the inclusion of SAME in standard therapy is an appropriate method of treatment in patients with MASLD as a pathogenetic drug with a pronounced cytoprotective, anti-inflammatory and antifibrotic effect.