

# **THE INFLUENCE OF EXPERIMENTAL LIVER INJURY ON THE ACTIVITY OF ANTIGEN-INDUCED SUPPRESSOR CELLS IN MURINE SPLEEN**

**I. N. Alexeyeva, T. M. Bryzgina, S. I. Pavlovich, T. M. Martynova**

Department of Immunology and Cytotoxic Sera, A. A. Bogomoletz Institute of Physiology, Kiev, Ukraine

## **SUMMARY**

The authors investigated in CBA mice the suppressor cell formation in spleen, induced by injection of a supraoptimal dose of sheep red blood cells and assessed their activity in a passive transfer experiment in animals with liver injury, caused by carbon tetrachloride treatment. The influence of liver explants from mice, treated with carbon tetrachloride, on antigen-induced cells, cultivated together in diffusion chambers, was also studied. It was shown that carbon tetrachloride administration inhibited the antigen-induced suppressor cells formation in murine spleen. Splenocytes, containing antigen-induced suppressor cells from mice treated with carbon tetrachloride, transferred to syngeneic mice together with an immunogenic dose of sheep red blood cells, caused a smaller decrease of the number of antibody-forming cells in the spleen of recipients than cells from normal mice. The liver explant damaged by carbon tetrachloride, influenced splenocytes, containing antigen-induced suppressor cells (AISC). This influence depended on the degree of liver injury. These data demonstrate the role of liver injury modifying the suppressor activity of splenocytes. The decrease of suppressor cell activity may be one of the mechanisms of enhanced antibody formation in patients with liver diseases.

*Key words:* antigen-induced suppressor cells, liver injury, carbon tetrachloride

Address for correspondence: T. M. Bryzgina, A. A. Bogomoletz Institute of Physiology, Bogomoletz Str. 4, 252024 Kiev, Ukraine