

SUMMARY

In the motorized world of nowadays the number of accidents and the operations of the traumatic patients are constantly increasing. The previous practice used to cut the damaged spleen out, but through the recognition of the various functions of the spleen, the viewpoint of the surgeons changed. For saving the tissue of the severely damaged spleen had Furka and his coworkers developed the spleen apron method of autotransplantation, in which they replant small slices of the spleen into the two layers of the greater omentum. This method was also adapted for mice by Mikó and her coworkers in 2001. In our current work we monitored the hematological and immunological changes after the spleen-autotransplantation in inbred mice, and we found the followings:

- 1) The autotransplanted spleen chips are taking positive effect in the ratio of the replanted size compared to their original amount of the spleen on the filtration of the erythrocytes, the ratio and the number of the T- and B- lymphocytes the phagocytic activity of the neutrophil granulocytes, and the level of IgM, playing a crucial role in the antibacterial defense.
- 2) The circulation of the spleen chip replanted into the greater omentum alters. The central artery disappears, the arrangement of the follicles, the red -, the white pulp and the macrophages change. From the alterations the following changes can be stressed: first, the decrease in the number of T- lymphocytes both in the spleen and in the periphery, second, the number of B-lymphocytes decreases in the periphery but increases in the follicles.