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THE STIMULATION OF THE THYMIC ENDOCRINE FUNCTION AND THE INDUCTION OF THE SYNTHESIS OF THE SUBSTANCES WITH THE THYMOSIN-LIKE ACTIVITY AFTER THE THYMECTOMY

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More than 40 different bioactive substances were allocated from the thymus tissue and blood serum. Only 4–8 polypeptides of these substances are considered as potential thymus hormones. One of them is thymus serum factor (TSF). The last is true thymus hormone which is secreted by thymus epithelium. TSF was identified by its ability to restore the sensitivity of the splenocytes to the antilymphocytic serum or azathioprine in the thymectomized mice.

Most nosological forms of diseases are accompanied by the disorders of the immune system and frequent development of secondary immunodeficiencies, that's why the study of the effect of the liposomal form of the biologically active supplement FLP-MD on the endocrine function of the thymus and its ability to induce the synthesis of the substances with thymosin-like activity (STLA) is quite actual. The last is also important for a full understanding of the possible mechanism of the immunotropic effect of the FLP-MD.

To study the effect of the liposomal form of the BAS on the thymus endocrine function the BAS was administrated to the intact animals and to study its ability to induce the STLA synthesis the BAS was administrated to the thymectomized mice at a dose of 27 ml per animal. In order to determine the dynamics of the STLA synthesis the researches were performed in 4, 24, 48, 72 and 96 hours after the administration of the FLP-MD BAS.

The obtained results indicate the property of the liposomal form of the BAS FLP-MD to affect on the thymus endocrine function and the STLA synthesis in the organism of the thymectomized animals. This effect of the FLP-MD BAS is observed for several days and depends on the routes of administration. Thus at the FLP-MD BAS administration to animals with the intact thymus the BAS force the thymus endocrine function, that is accompanied by the increase of the TSF level. At the parenteral administration the maximum increase of the TSF titer is observed in 4 h, and at the oral administration – in 24 h. *In vivo* the FLP-MD BAS induces the STLA synthesis in the thymectomized animals. The dynamics of this process also depends on the routes of administration of the FLP-MD BAS: at its oral administration the STLA are synthesized during 72 h with a maximum in 4 h and at its parenteral administration – during 48 h (with a maximum in 24 h).