Action of thioperamide in the immunosuppressive test in mice

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Abstract:
The present experiment was conducted to investigate the influence of thioperamide on the immunological system. The study was performed on female albino Swiss mice. Mice were divided into group A – without adenalecetomy and five groups with adenalecetomy. In group B – 0.9% saline solution, in group C – predniisolone, in groups D, E and F – thioperamide (3, 15 and 45 mg/kg) were administered. All substances were given for 4 consecutive days. Then the mice were sacrificed, thymuses and spleens were weighted and thymocytes were selected.

Adenalecetomy caused an increase in thymus weight and lymphocyte number. Predniisolone prevented these changes. Thioperamide inhibited thymus enlargement and decreased the number of thymocytes but the changes were not so pronounced. The strongest influence of thioperamide on those parameters was observed in group E. No influence of thioperamide on spleen weight was noted. Immunosuppressive properties of thioperamide were revealed but explanation of the exact mechanism requires further studies.

Key words:
thioperamide, immunosuppressive test, predniisolone, mice