

On the 4th day of alloxan administration, the ethanol decreased the glucose content by 24.2%, and the amino acid mixture by 32.4% and on the 5th day 26.3% and 33%, respectively, i.e. the use of these two substances has a positive effect on the amount of glucose in the blood.

The behavior of all animals was recorded using "Open field" test. Animal behavior has dramatically changed under the influence of alloxan: motor, orientation-research activity and emotion decreased, depression occurs. The action of alloxan was so strong, that the single injection of ethanol or amino acids mixture did not make visible changes, which would probably be with prolonged use of these substances.

All values are presented as mean \pm standard error (MEAN \pm SEM). Data were statistically analyzed by Sigma Stat test. A statistically significant comparison test was performed with ONE WAY ANOVA. The reliability of the mean differences between the control and experimental groups was observed at $p < 0.05$.

Results of this study show that the single administration of ethanol and the amino acid mixture have hypoglycemic action in Alloxan induced diabetic model, which is mediated via increased peripheral utilization of glucose, but do not act on the animals behavior.

INVESTIGATION OF THE EFFECT OF GALARMIN ON THE PERIPHERAL BLOOD COMPOSITION OF MICE WITH THE INFECTION OF METHICILLIN-RESISTANT STRAIN OF *STAPHYLOCOCCUS AUREUS* (MRSA)

Matevosyan M.B., Durgaryan A.A.

Yerevan State University

H. Buniatian Institute of Biochemistry of NAS RA.

matevosyanm@usy.am

mara_matevosyan@hotmail.com

Staphylococcus aureus (*S. aureus*) and particular its methicillin-resistant strains (MRSA) are emerging one of the major health threats in many countries worldwide and are responsible for the majority of severe cases of intra- and community-acquired staphylococcal infections.

Discovered by A.A. Galoyan proline-rich polypeptides (PRPs) isolated from the neurosecretory nuclei of the bovine hypothalamus and neurohypophysis (*N. paraventricularis* and *N. supraopticus*) represent a new family of hypothalamic neuropeptides. It has been shown that PRP-1 or Galarmin possesses cytokine activities and exhibits a wide range of biological functions, including immunomodulating, antioxidant, antitumor, neuroprotective and antibacterial properties.

The influence of Galarmin on hemotological and serological parameters of peripheral blood of infected mice was studied. Under the influence of the Galarmin, a redistribution of blood cells, a change in the absolute number of leukocytes and platelets, as well as a dose-related increase in the percentage of lymphocytes was observed. The summarized data show the complex and non-specific effect of Galarmin on the immunological parameters of the blood of infected animals.

CHANGES IN FIBRIN-STABILIZING FACTOR ACTIVITY UNDER THE ACTION OF HYPOTHALAMIC PROLINE- RICH PEPTIDES

Paronyan Z.Kh., Grigoryan L.S., Stepanyan A.H., Araqelyan L.N.

Institute of Biochemistry, NAS RA

aregarpi4@gmail.com

Proline rich peptides (PRP) have been found in various animal species from invertebrates to mammals. The presence of a large number of proline amino acid residues in the structure of PRP gives them the opportunity to easily interact with various protein molecules, including those involved in key biochemical reaction cascades. Peptides of this family are characterized by low toxicity to mammalian cells. Such a peptide is the neuromodulator PRP-1, which belongs to the family of hypothalamic neuropeptides. PRP-1 consists of 15 amino acid residues, has cytokine properties with a wide spectrum of biological activity, including immunomodulating, antioxidant, antitumor, neuroprotective and antibacterial properties, it also regulates humoral and cellular immunity. The next proline-rich peptide of the hypothalamus GX-NH₂ studied by us, is an analog of galarmin (PRP-1), consisting of 10 amino acid residues, where the last proline is amidated. The