maximal electroshock, arecoline tremor, etc. As a result of the studies, active compounds for antagonism with corazole were identified, some of which (the most active) were studied on the psychotropic effect on the models : "Open field", "elevated cross-shaped labyrinth", "forced swimming", "rotating rod". 50% effective doses of the compounds, therapeutic and / or protective indices were calculated.

Among the studied amino acids, the most active compounds identified were N-p-propoxybenzoyl, N-p-isopropoxybenzoyl, N-p-butoxybenzoyl and N-p-isobutoxybenzoyl radicals. Derivatives are most active in the test of corazole seizures Zn in comparison with GABA bases and lithium salts, but they are much more toxic than them. GABA base muscle relaxation and their lithium salts are caused in doses much higher than the effective doses, and zinc derivatives - in doses very close to therapeutic ones.

Key words: γ-aminobutyric acid, neuroamino acids, GABA, Zink, Lithium derivatives, anticonvulsant

PROTECTIVE EFFECTS OF GALARMINE AND VENOM OF NAJA OXIANA ON SUBSTANTIA NIGRA OF RATS IN A MODEL OF PARKINSON'S DISEASE.

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Parkinson's disease is the most common movement disorder in a wide range of neurodegenerative diseases, primarily resulting from the death of the dopaminergic neurons of the substantia nigra and associated with the gradual degradation of the individual. Therapy aimed at slowing down the death of dopaminergic neurons can be effective. A comparative study of the morphofunctional state of the cellular structures of rats substantia nigra neurons of the Parkinson's disease rotenone model and also on this model with treatment by venom of the Central Asian cobra *Naja naja oxiana* (NOX) and with the introduction of galarmine has been carried out.

Analysis of the results of the study shows that with the introduction of galarmine and small doses of venom, an increase in phosphatase activity is observed, the normal morphological picture is preserved, positive changes in the structural properties of the substantia nigra neurons are compared with the Parkinson's disease model, and galarmin is more effective. The data obtained suggest that galarmine and small doses of NOX venom act as a neuroprotective agents.

Key words: *Parkinson's disease, substantia nigra, galarmine, NOX venom, neuroptotection.*

ALCOHOL, DIABETES MELLITUS AND ITS IMPROVEMENT

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Diabetes mellitus (DM) is one of the diseases of the century and it has not been fully studied yet. Over 400 million people on our planet suffer from diabetes and most of them consume alcoholic beverages. The research aimed to create a model of 1-st form diabetes by alloxan in laboratory white rats, study the behavior of sick rats under the influence of ethanol and try to improve the state of diabetes caused by alloxan by giving the animals an amino acid mixture.

The experiments were carried out in two series. 32 healthy male white rats were divided into 4 groups. All animals except the control group, were intraperitoneally (i/p) injected with alloxan at a dose of 150 mg/kg body wt. In 3 days after the injection (confirming stable DM image) the blood glucose level increased 5-fold compared with the control group. The following symptoms have been observed in animals with DM: increased use of water by animals (more than 120 ml), excessive urination, abrupt weight loss, hair loss, depression. Animals in one group were i/p injected with 25% ethyl alcohol at a dose of 2.5 g/kg and with an amino acid mixture (100 mg/kg GABA, 50 mg/kg glutamine, 100 mg/kg β-alanine) in another group.