

data obtained indicate the feasibility of finding new, more effective substances in a number of derivatives of the amino acid L-arginine.

Key words: NOS, NO-synthase, L-arginine, derivatives of the amino acid, malonic dialdehyde, MDA

THE ROLE OF MICROELEMENTS CONTAINING AMINO ACIDS IN THE DEVELOPMENT OF THE BODY

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In the case of the formation of a pathogenic excess of microelements (ME) in the environment, it is necessary to carry out comprehensive measures to adjust their quantity in environmental objects aimed at regulating the intake of ME into the body. It should be noted that the same trace elements in a different dosage and possible forms are necessary for the normal functioning of human and animal organisms.

Such chemical elements include: iron, copper, cobalt, zinc, molybdenum, manganese, strontium, boron, selenium, fluorine, iodine, which are used in medicine.

At present, the number of such biogenic chemical elements is growing, as the physiological role outside the new and new chemical elements, and their.

Studies are included in research plans - lithium, cadmium, cesium, barium, titanium, vanadium, chromium, antimony, arsenic, mercury, bismuth, and discoveries in the field of biogeochemistry and biology are possible.

Experimenters and clinicians describe the very important effects of these cations with amino acids in one molecule.

Based on the studies, it can be concluded that Li⁺, Zn (II), Ag (I) containing derivatives of amino acids and peptides have a wide spectrum of pharmacological action, that is, they have antioxidant, fibrolitic, antimutagenic, radioprotective, antidepressant, psychotropic activities.

Key words: microelements, Lithium, Li, Silver, Ag, Zink, Zn, antioxidant, radioprotective

ANTI-CONVULSION AND PSYCHOTROPIC ACTIVITY OF N- AND C-SUBSTITUTED DERIVATIVES OF NEUROAMINO ACIDS

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The great interest of pharmacologists and clinicians is attracted to the various properties of certain derivatives of neuroamino acids. One of the groups of biologically active substances is neuroactive amino acids, for which the mediating role and functions of modulators of various processes in the body are proved. GABA-based drugs have long been used as neurotropic, with anticonvulsant, psychotropic, nootropic, neuroprotective properties.

Recently, during therapy with antiepileptic drugs, mainly of the second generation, there has been a tendency to optimize treatment aimed at the use of anticonvulsants with advanced combined properties. So, epileptic mood disorders, twilight dizziness, epileptic psychoses, epileptic personality changes, disorders of the emotional sphere are known. A new direction in treatment allows such drugs to be used in various related fields of neurology and psychiatry, when it becomes necessary to alleviate emotional stress, cause relaxation and sedation.

In this regard, we synthesized and studied the neurotropic properties of the new 15 N- and C-substituted derivatives of GABA (N-p-alkoxybenzoyl GABA) and their lithium and zinc salts. The correct combination of the obtained amino acid derivatives with lithium and zinc cations is also attractive in the sense that these cations are used for the treatment and prevention of manic-depressive psychosis and various affective conditions.

We investigated the anticonvulsant properties of the compounds according to the tests: corazole, nicotine, thiosemicarbazide convulsions,