NITROZINE STRESS AND NEUROLOGICAL DISORDERS IN EXPERIMENTAL ALCOHOL INTOXICATION AND THEIR PHARMACOLOGICAL CORRECTION BY NEUROPEPTIDES

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Abstract:

Objectives. The article aims to provide a comparative estimation of Cerebrocurin, Cortexin and Cerebrolisin neuroprotective effect on the outcome of experimental chronic alcoholism in rats. Methods. 50 Wistar rats were subjected to transient, experimental chronic alcoholism and were randomly assigned to 5 groups (n = 10 each): (1) Intact, (2) Control, (3) Cerebricurin, (4) Cortexin, (5) Cerebrolisin. Investigated preparations were administered during 14 days parenteraly after 30-days violent alcoholization. Functional defcits were quantifed by daily neurological examinations (Garcia et al., 1995); rats behavior was quantifed in the test of Passive Avoidance Conditioned Response (PACR). Nitrotirosine value were measured after treatment. Results. Against a background of chronic alcohol intoxication in rats, we have promoted indicators nitrozile proteins in plasma and brain refecting the activation processes of nitrozine stress in each groups. We have conducted interrelations between the level of nitrotirozine in rat brain and the manifestations of neurological defcit in scores on McGrow in the control group at the end of the experiment. Conclusions. The most active drug was Cerebrocurin, which demonstrated a signifcant reduction of nitrotirozine in plasma and especially in the brain of the rats relative vs vehicle-treated controls and normalized neurological status. This is an experimental justifcation for inclusion Cerebrocurin in traditional model of treatment of chronic alcoholism.

Опубліковано:

Sokolik E. P. Nitrozine stress and neurological disorders in experimental alcohol intoxication and their pharmacological correction by neuropeptides / E. P. Sokolik // X International Congress of Medical Sciences, 12-15 may, 2011, Sofia, Bulgaria : abstracts. – Sofia, 2011. – P. 23.