

МАТЕРИАЛЫ КОНФЕРЕНЦИИ  
И ШКОЛЫ

THE EFFECT OF LONG-TERM ALCOHOL DRINKING ON THE BEHAVIOR  
OF RATS AFTER EARLY SOCIAL ISOLATION

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This work is a stage in the study of the combination of mental disorders and alcohol abuse in experimental models and clinical practice. The aim of the experiment was to evaluate the effect of ethanol and early social isolation on ethanol preference, social interactions, and motor and research activity of rats. Methods: half of the animals were subjected to early social isolation before the start of the experiment: from 21 to 35 days after birth with minimization of any contact, including with a person, during the isolation period. At the end of isolation, all rats were divided into four groups: rats that were isolated ( $n = 20$ ), rats that were isolated and received ethanol ( $n = 20$ ), rats that received ethanol ( $n = 20$ ) and control animals ( $n = 20$ ) that received water. A 15% solution of alcohol was obtained as a liquid for drinking in the following way: Monday, Wednesday, Friday – access only to the ethanol solution; Tuesday, Thursday – drinking deprivation, Saturday, Sunday – access only to water. Animals that did not receive ethanol received water throughout the experiment in the following modes: Monday, Wednesday, Friday, Saturday, Sunday – access to water, Tuesday, Thursday – drinking deprivation

to exclude the influence of drinking regimen features on the experimental results. At the end of the experiment, animal behavior was studied in the Social Interactions test and New Object Recognition test, ethanol preference was evaluated once every two weeks in the Two-bottle test throughout the entire period of drinking. Results: it was found that early social isolation did not affect the preference for ethanol and the motor and research activity of animals. According to social interactions, animals of all experimental groups reliably less sniffed at each other. However, there were no differences between groups with different exposure factors. Conclusions: thus, prolonged soldering with ethanol did not affect the preference for ethanol. locomotor and research activity of rats with experimental schizophrenia using a model of early social isolation. At the same time, early social isolation and ethanol drinking led to a decrease in social activity three months after the end of isolation.

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