

**Neuroleptic Effects On Ethanol Preference and Behavior in Rats with Experimental Schizophrenia**

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Comorbid substance abuse disorders including alcoholism have emerged as one of the greatest obstacles to the effective treatment of persons with schizophrenia. The aim of the study was the investigation of antipsychotic effect on alcohol preference and behavior in rats with experimental schizophrenia induced by Levodopa + Carbidopa (LC) administration.

The study was conducted on 45 adult Wistar male rats. All animals received 300/30 mg/kg LC during 5 days before and 2 months after the experiment start. Group I has received 1.5 mg/kg haloperidol while group II received 0.5 mg/kg risperidone during 5 days before and 2 months after of the experiment start. Group III was a control. All rats were alcoholized on Monday, Wednesday, Friday by 15% ethanol solution while on Tuesday and Thursday they had drinking deprivation and free access to water in the weekend. The behavior parameters have been evaluated in the "open field test".

It was found that animals treated by neuroleptics, especially haloperidol after 1 and 2 months of alcoholization, have showed greater alcohol preference compared to controls. In the "open field" all animals did not differ in horizontal activity. The animals treated by haloperidol showed a significantly lower vertical activity and peeping. Rats treated by risperidone had significantly longer way in the field center after 4 months of the study.

Thus, the introduction of neuroleptics leads to an increase in alcohol consumption in the "two-bottle-test" especially after first two months of haloperidol administration. Haloperidol reduced motor and exploratory activity compared to risperidone and control animals.