

## **P-23 - LEVODOPA+CARBIDOPA MODELING OF POSITIVE SYMPTOM SCHIZOPHRENIA INCREASE ALCOHOL PREFERENCE IN WISTAR RATS**

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It is known that alcohol misuse in schizophrenic patients is higher than in general population. But it remains unclear whether it directly depends on the disease or on the other reasons. The aim of the study was to examine the alcohol preference in rats with pharmacologically induced positive symptom schizophrenia compared to control intact animals.

The study was conducted on 45 adult Wistar rats. Experimental animals received Levodopa+Carbidopa in dose 300/30 mg/kg every 5 days in the month. All animals received 15% ethanol solution three days a week while in three days they had drinking deprivation and on weekends they had free access to water. Every two weeks after 24 hours of drinking deprivation alcohol preference was measured by the standard "two bottle test". The behavior was evaluated in the "open field" test. The animal responses to an auditory stimulus were elucidated.

Rats treated with Levodopa showed a significantly higher preference for ethanol in the "two bottle test" after the first month of the experiment compared to control. After 2 months alcohol preference in the experimental and control groups was high and did not differ. Differences in behavior parameters after the "open field" testing were not observed. The Levodopa + Carbidopa rats demonstrated a decreased threshold to acoustic stimuli (hyperacusia) compared to controls.

Levodopa modeling of positive symptom schizophrenia leads to a significantly greater alcohol preference for experimental rats. It can be assumed that high dopamine level is one of the reasons for the alcohol consumption in patients with schizophrenia.