

## **INTERMITTENT INTOXICATION WITH ETHANOL VAPOR INDUCES A LONG-LASTING HYPNOTIC TOLERANCE AND BEHAVIORAL SENSITIVITY IN RAT**

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It well recognizes that exposure to ethanol, such as induces changes in tolerance and in sensitivity in human and experimental animals. In addition, repeated administration of alcohol, as psychomotor stimulants and opiates, induces behavioral sensitization. We have previously shown that repeated cycles of ethanol vapor intoxication and withdrawal for a prolonged period of time induces a phenotype long-lasting increased drinking behavior in no-selected rats that models several factors of human alcoholism. In the present paper, we studied the development of tolerance and behavioral sensitivity induced by prolonged intermittent cyclic exposure to ethanol vapor. Wistar rats with and without a history of alcohol dependence were injected with a hypnotic ethanol dose (3 g/kg) and the loss of righting reflex (LORR) was recorded. To study changes in ethanol metabolism, blood ethanol levels (BLA) were monitored at different time point and elimination rate was calculated. Finally, the effect on horizontal locomotor activity induced by systemic treatment with a low dose of ethanol (0.5 mg/kg) was registered in habituated animals. We observed a significant decrease of LORR in animals with history of dependence. This decrease was not coupled with changes either in BLA or ethanol metabolism. Low dose of ethanol induced an increase in motor activity in animals with a history of dependence. These results support the evidence of a long-lasting change in hypnotic tolerance and behavioral sensitivity induced by 7-w intermittent cycling of intoxication.