

SHORT COMMUNICATION

NMDA ANTAGONISTS INHIBIT THE DEVELOPMENT OF ETHANOL DEPENDENCE IN RATS

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NMDA antagonists inhibit the development of ethanol dependence in rats. J. KOTLIŃSKA. Pol. J. Pharmacol., 2001, 53, 47–50.

The influence of non-competitive NMDA receptor antagonist, 1-amino-3,5-dimethyl-adamantane (memantine), and glycine_B site antagonist, 7-chloro-4-hydroxy-3-(3-phenoxy)phenyl-2(1H)-quinolone (L-701,324), on the development of ethanol dependence was investigated in Wistar rats. The development of ethanol dependence was induced by intragastric administration of 20% w/v ethanol, three times a day at increasing doses. The results were quantified using withdrawal audiogenic seizures, 12 h after the last ethanol administration. Memantine (3.75 or 7.5 mg/kg) and L-701,324 (2.5 or 5 mg/kg), given before ethanol administration, prevented the development of ethanol dependence. Our results support the data that NMDA receptors are involved in the development of ethanol dependence.

Key words: *ethanol, dependence, memantine, L-701,324, rats*
