SHORT COMMUNICATION

EFFECTS OF ANXIOLYTIC DRUGS ON SOME BEHAVIORAL CONSEQUENCES IN OLFATORY BULBECTOMIZED RATS

Joanna M. Wierońska, Mariusz Papp, Andrzej Pilc

Department of Neurobiology and Department of Pharmacology, Institute of Pharmacology, Polish Academy of Sciences, Smętna 12, PL 31-343 Kraków, Poland


The present study was designed to evaluate the effects of bulbectomy and acute administration of anxiolytic drugs (diazepam, 10 mg/kg; chlordiazepoxide, 10 mg/kg) on the behavior of both sham-operated and olfactory bulbectomized rats in two tests predictive of anxiolytic activity: plus-maze test and Vogel’s conflict test. We investigated also the effect of flumazenil (10 mg/kg), a benzodiazepine receptors antagonist, both on control and drug-treated animals. We also evaluated behavior of animals in conditioned place aversion procedure. Our results show the decreased level of anxiety in bulbectomized animals comparing with sham-operated rats. Anxiolytic drugs further deepen this effect.

Key words: olfactory bulbectomy, anxiety, diazepam, chlordiazepoxide, flumazenil, plus-maze, Vogel’s test, conditioned place aversion

*correspondence