

AIDA INFLUENCES BEHAVIOR IN RATS PRETREATED WITH BACLOFEN

*Halina Car, Agnieszka Nadlewska, Robert Okszel,
Konstanty Wiśniewski[#]*

Department of Pharmacology, Medical Academy, Mickiewicza 2c, PL 15-222 Białystok, Poland

AIDA influences behavior in rats pretreated with baclofen. H. CAR, A. NADLEWSKA, R. OKSZTEL, K. WIŚNIEWSKI. Pol. J. Pharmacol., 2001, 53, 245–252.

The influence of the blockade of group I metabotropic glutamate receptors (I mGluRs) by AIDA on some behavioral effects of rats pretreated with baclofen, an agonist of GABA-B receptor, was investigated using behavioral tests: the open field, the passive avoidance response and the elevated “plus” maze.

Baclofen, applied intraperitoneally (*ip*) at a dose of 0.25 mg/kg, increased the number of crossed fields and bar approaches in rats in the open field test, and prolonged the time spent in the closed arms, shortened the time spent in the open arms and decreased the number of entries to the open arms in the elevated “plus” maze, but did not affect retrieval in the passive avoidance response.

AIDA administered intracerebroventricularly (*icv*) alone at a dose of 100 nmol reduced crossings and rearings in the open field test, however, it had no effect on retrieval in the passive avoidance situation, nor did it show any influence in the elevated “plus” maze. AIDA given 15 min after baclofen significantly decreased mobility of rats (in the case of crossings to the level observed when AIDA was given alone), i.e. AIDA changed the effects of baclofen in the open field test. We also noted significant impairment of retrieval in rats pretreated with baclofen, which later received AIDA. AIDA significantly reduced the effect of baclofen on this memory process. In the elevated “plus” maze test, AIDA did not influence the behavior of rats pretreated with baclofen in comparison with the group treated with baclofen alone.

Key words: *baclofen, AIDA, retrieval, elevated “plus” maze, locomotor activity, rats*

[#] *correspondence*; e-mail: farmakologia@poczta.onet.pl