

INFLUENCE OF AIDA ON CERTAIN BEHAVIORS IN RATS SUBJECTED TO EXPERIMENTAL HYPOXIA

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The influence of the blockade of group I metabotropic glutamate receptors (mGluRs) by AIDA [(RS)-1-aminoindan-1,5-dicarboxylic acid] on some behavioral effects was tested in control groups of rats and in rats that underwent short-term hypoxia. We used the following methods: the open field test, the passive avoidance test and the elevated “plus” maze test.

In rats without hypoxia, AIDA (100 nmol *icv*) decreased the number of crossings in the open field test, impaired acquisition, improved consolidation and did not influence retrieval in the passive avoidance situation and was ineffective in the elevated “plus” maze.

Short-term hypoxia (2% O₂, 98% N₂), as a model of experimentally induced amnesia, significantly inhibited locomotor and exploratory activity and profoundly impaired acquisition, consolidation and retrieval processes and did not exhibit proanxiogenic or anxiolytic effect in elevated “plus” maze.

AIDA (100 nmol *icv*) used before hypoxia significantly improved consolidation and retrieval processes, but had no effect on acquisition and did not significantly influence all parameters of the elevated “plus” maze test.

The obtained results suggest that AIDA, the selective antagonist of group I mGluRs, had beneficial effects on consolidation and retrieval of passive avoidance in rats undergoing hypoxia.

Key words: *AIDA, passive avoidance, locomotion, elevated “plus” maze, hypoxia, rats*

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