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Poster presentation

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Evaluation of amnesia induced by intracerebroventricular (i.c.v) administration of lithium in an inhibitory avoidance task in mice

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Background

Lithium is used as a stabilizer in mood disorders such as bipolar depression. Studies show that the drug cause memory deficits in patients treated with the drug.

Materials and methods

In the present study using inhibitory avoidance task (step-down model) time of memory impairment by lithium in male NMRI mice has been investigated.

Results

Immediate post-training administration of different doses of lithium (1, 2 and 4 μgr/mouse) impaired memory retention 24h later. Injection of the same doses of lithium 30 min after training showed impairing effect on memory more effectively. With injection of lithium 45 min after training its impairing effect was decreased and only at the dose of 4 μgr/mouse, memory impairment was observed.

Conclusions

The results show that post-training administration of lithium dose-and time-dependently impaired memory of inhibitory avoidance. It can be concluded that lithium impairs memory retention and its effect at 30 min after training was maximum response.