Effect of Intracerebroventricular Administration of L-Carnitine on Memory Retention In Normal and Ovariectomized Adult Female Rats

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Objectives: L-carnitine is of considerable interest because of its capacity to counteract several physiological and pathological phenomena typical of brain aging processes.

Materials and Methods: The present study investigated the effect of L-carnitine on memory retention of passive avoidance learning in normal and ovariectomized rats. We examined the effects of L-carnitine on the learning ability of normal and ovariectomized rats. L-carnitine (1, 5 and 10 mg/rat) was received intracerebroventricular injections to normal and ovariectomized adult female rats.

Results and Discussion: Our results showed that oral and intracerebroventricular administration of L-carnitine increased step-through latency time and decreased time in dark compartment in passive avoidance tasks in rats. It is concluded that L-carnitine increased memory retention in rats. It is suggested that L-carnitine must be considered as an alternative/adjunctive treatment to potentiate memory retention.

Keywords: L-carnitine, Ovariectomy, Memory, Learning, Rat

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Results and Discussion: Our results showed that oral and intracerebroventricular administration of L-carnitine increased step-through latency time and decreased time in dark compartment in passive avoidance tasks in rats. It is concluded that L-carnitine increased memory retention in rats. It is suggested that L-carnitine

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