

ABSTRACT

The Effect of Quercetin on the Motor and Sensoric Functions in Animal with Ischemic Stroke

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Ischemic stroke is induced by insufficient or interrupted of blood flow to an area of the brain. That may resulted brain damaged by the free radical components. The aim of this research was to investigate the effect of quercetin on the motor and sensoric functions in mice with stroke model. Mice were divided into five group : sham, ischemic stroke and ischemic stroke with treatment by 100 mg/kg; 150 mg/kg; 200 mg/kg of quercetin. Quercetin was administered intraperitonealy once a day for 7 days. It was evaluated by ladder rung walking test, narrow beam test for motor function then adhesive removal tape test for sensoric function. The test was measured at the day before induction and at day 1, 4, 7, 10 and 14 after induction. The Ladder rung walking test and narrow beam test showed that ischemic stroke decreased the motor function. Furthermore, the adhesive removal tape test demonstrates that ischemic stroke caused decrease in sensoric function. Quercetin at 100 mg/kg; 150 mg/kg; 200 mg/kg improved that function. This research suggested that quercetin improves motor and sensoric functions after ischemic stroke.

Keywords : Quercetin, Ischemic stroke, Motor, Sensoric.