ABSTRACT

Andrografolide Effect on Motor, Sensory, and Kognitive Functions in Animal Model Induced by Ischemic Stroke

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Ischemic stroke occurs because of the blockage of blood flow to the brain which reduce glucose and oxygen flow to the brain and causes interference of motor, sensory, and kognitive functions. Andrographolide suspected to be a neuroproctive agent to avoid the brain cell death. Several study showed that andrographolide can increase the kognitive and motor functions but there‟s no effects on sensory function. This study aimed to observe the sensory function improvement with adhesive removal test, the kognitive function with t maze method, and the motor function using ladder rung walking test and narrow beam test.

Animals were induced by ischemic stroke using Left Unilateral Common Carotid Artery Occlusion for 2 hours. There are 4 test group named by sham, stroke, three stroke and sham with 0.5; 1; 2 mg /kg dose of Andrographolide. Andrographolide was administered intraperitoneally 30 minutes after the occlusion was done. The animal weight was measured after every treatment. This study showed that andrographolides which known as neuroprotectant agent can be used to improve the cognitive, sensory and motor function in the animal model induced by inschemic stroke using 1UCCAO model.

Keywords: Androrapholide, CCAO, cognitive, ischemic stroke, motor, sensory