





The study design was a laboratory rat experiment of middle cerebral artery occlusion causing cerebral ischemia/reperfusion. Acupuncture points GV20 and ST36 were applied. The results demonstrated several repeatable scientific phenomenon in fMRI imaging and biochemical analyses. GV20 and ST36 reduced infiltration of inflammatory cells, downregulated expression of proinflammatory enzyme MMP2, reduced expression of water channel proteins AQP4 and AQP9, reduced brain ischemia and decreased brain edema due to inflammation. Neurologic function was increased and verified by improved motor tests such as muscle status and movement capabilities; sensory tests including visual, tactile and proprioceptive evaluation; improvements in balance tests and improvements in reflex tests. Additionally, infarct size significantly reduced.

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