

Antispastic Effect of Electroacupuncture and Moxibustion in Stroke Patients

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Objective: Spasticity is a frequently observed motor impairment that develops after stroke. The objective of this study was to evaluate the efficacy of electroacupuncture (EA) and moxibustion (Mox) on spasticity due to stroke.

Methods: The subjects consisted of 35 stroke patients with elbow spasticity whose mean duration of stroke was 2.97 months. Fifteen patients were randomized to the EA group, ten to Mox, and ten to control. Every other day, 30 minutes of electrical stimulation with a frequency of 50 Hz was given through four needles on the Ch'u-Ch'ih⁻, San-Li (LI-11-LI-10) and Wai-Kuan-Ho-ku (TB-5-LI-4) points of the paretic side. Direct Mox was applied to Ch'u-Ch'ih (LI-11), Sam-Li (LI-10), Wai-Kuan (TB-5) and Ho-Ku (LI-4) points three times a day every other day. The control group was given only the routine acupuncture therapy for stroke and range of motion (ROM) exercise, which were also applied to the EA and Mox groups. The efficacy of treatment was measured before, immediately, 1 hour, 3 hours, 1 day, 5 days, 10 days and 15 days after the start of treatment using a modified Ashworth scale (MAS).

Results: In the EA group, spasticity was significantly reduced immediately, 1 hour and 3 hours after treatment ($p < 0.05$). Reductions were significant on the 5th day and thereafter ($p < 0.05$). In the Mox group, there was no significant change in the MAS scores after the first treatment. In the Mox and control group, there was no significant change in MAS scores.

Conclusion: This study suggests that EA can temporarily reduce spasticity due to stroke, and if applied repeatedly it can maintain reduced spasticity.