

9. Cardiovascular Diseases

Reference

Kim MB, Shin HD, Kim SS. The influence of electroacupuncture interosseous muscle for hand function in hemiplegic patients after stroke. *Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)* 2005; 15(4): 17–28 (in Korean with English abstract).

1. Objectives

To evaluate the effectiveness of electroacupuncture for hand function recovery in hemiplegic patients after stroke.

2. Design

Randomized controlled trial (RCT).

3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

4. Participants

Patients with stroke onset of more than 4 weeks and muscle strength with Medical Research Council (MRC) score of less than 4 (n=10).

5. Intervention

Arm 1: Conservative therapy + electroacupuncture treatment (6 rounds per week, 20 minutes per round, 2 Hz electroacupuncture at the Hegu (LI 4, 合谷), Zhongzhu (TE3, 中渚), and Palsa (EX-UE9, 八邪) acupuncture points (n=5).

Arm 2: Conservative therapy only (n=5).

6. Main outcome measures

Measurement of strength of the carpal joint muscles using MRC score.

Scores on the Jebsen-Taylor Hand function test, Action Research Arm test, and modified Barthel Index. Grasping power measured using a squeeze bulb dynamometer.

7. Main results

- 1) The muscle strength at the carpal joint was significantly improved in Arm 1 compared to Arm 2 ($P=0.016$).
- 2) There was a significant increase in grasping power and in score on the Action Research Arm test in Arm 1 compared to Arm 2 ($P=0.032$) but no significant between-group difference in score on the Jebsen-Taylor hand function test ($P=0.310$).
- 3) There was no significant between-group difference in daily life (assessed by modified Barthel Index).

8. Conclusions

Electroacupuncture is effective for recovering muscle strength at the carpal joint, grasping power, and hand function.

9. Safety assessment in the article

Not mentioned.

10. Abstractor's comments

This study evaluates the effectiveness of electroacupuncture for impaired hand function due to stroke. Muscle strength at the carpal joint, grasping power, and hand function recovery were observed in response to treatment. However, the study had limitations such as small patient numbers and short study period, suggesting the need for additional clinical trials.

11. Abstractor

Go HY, 18 July 2010.