9. Cardiovascular Diseases

Reference

1. Objectives
To evaluate the effectiveness of electroacupuncture for upper extremity hemiplegia after stroke.

2. Design
Randomized controlled trial (RCT).

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

4. Participants
Patients with cerebral infarction and Fugl-Meyer motor score below 46 before treatment within two weeks of stroke onset (n=40).

5. Intervention
Arm 1: Conservative therapy + electroacupuncture (25–50 Hz) for 4 weeks, 6 rounds per week, 20 minutes per round applied to the Quchi (LI11, 曲池)- Shousanli (LI10, 手三里), Waiguan (TE5, 外關)- Hegu (LI4, 合谷) acupuncture points (n=20).
Arm 2: Conservative therapy (n=20).

6. Main outcome measures
Fugl-Meyer motor assessment, muscle strength at the shoulder and elbow joint, the subsection of the modified Barthel Index (involving drinking, feeding, dressing the upper body, and grooming).

7. Main results
Fugl-Meyer motor assessment score tended to be higher in Arm 1 than in Arm 2 (P=0.061). The improvements in muscle strength and coordination at the shoulder and elbow joint were significantly greater in Arm 1 (P=0.008 and 0.047, respectively), but the improvements in muscle strength and coordination at the hand and wrist were similar in both groups. There were no between-group differences in drinking, feeding, dressing the upper body, and grooming after treatment.

8. Conclusions
Electroacupuncture has efficacy for upper extremity paralysis after stroke.

9. Safety assessment in the article
No significant adverse events during 4 weeks of observation.

10. Abstractor’s comments
This study evaluated the effectiveness of electroacupuncture for upper extremity paralysis after stroke. As the number of subjects was small and conservative therapy was used with electroacupuncture, the result is not conclusive. Moreover, the follow up period was only 4 weeks, so the long-term effect of electroacupuncture remains unclear. Thus, additional studies are needed.

11. Abstractor and date
Go HY, 18 July 2010.