9. Cardiovascular Diseases

Reference

1. Objectives
To evaluate the effect of electroacupuncture on upper extremity function 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
Stroke patients with hemiplegia more than 2 weeks after onset and stable vital signs (n=28).

5. Intervention
Electroacupuncture was administered for 20 minutes per round, 6 rounds per week for 4 weeks.
Arm 1: Conservative therapy + electroacupuncture applied to the Quchi (LI11, 曲池)- Shousanli (LI10, 手三里) and Jianyu (LI15, 肩髃)- Naoshu (SI10, 臍兪) acupuncture points, with oblique insertion 3 cm deep (not into the muscle) (n=13).
Arm 2: Conservative therapy + electroacupuncture applied to the Quchi (LI11, 曲池)- Shousanli (LI10, 手三里) and Jianyu (LI15, 肩髃)- Naoshu (SI10, 臍兪) acupuncture points with vertical insertion 3 cm deep (into the muscle) (n=15).

6. Main outcome measures
Upper extremity muscle strength evaluation, Fugl-Meyer score, and Modified Barthel Index (MBI).

7. Main results
1) There was no between-group difference in muscle strength at the shoulder and elbow joints before and after treatment, but there was a tendency toward increased strength in Arm 1.
2) Fugl-Meyer score was significantly higher in Arm 1 than in Arm 2 (P=0.043).
3) The between-group difference in MBI was not significant.

8. Conclusions
Electroacupuncture may help restore upper extremity function in hemiplegic patients after stroke. Oblique acupuncture (stimulation of the fascia) is more effective than vertical acupuncture (stimulation of the muscle).

9. Safety assessment in the article
Not mentioned.

10. Abstractor’s comments
This study compared the effectiveness of oblique electroacupuncture with vertical electroacupuncture (two variations of the method differing only in needle insertion orientation). Additional studies with more patients and for longer periods are needed.

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