

9. Cardiovascular Diseases

Reference

Kim YS, Hong JW, Na BJ, et al. The effect of low vs. high frequency electrical acupuncture point stimulation on motor recovery after ischemic stroke by motor evoked potentials study. *American Journal of Chinese Medicine* 2008; 36(1): 45–54.

1. Objectives

To evaluate the effect of high and low frequency electroacupuncture on dyspraxia 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 cerebral infarction and hemiplegia, hospitalized from 1 week to 1 month after onset (n=62).

5. Intervention

Electroacupuncture applied to the Hegu (LI4, 合谷), Quchi (LI11, 曲池), Shousanli (LI10, 手三里), Waiguan (TE5, 外關), Zusanli (ST36, 足三里), Shangjuxu (ST37, 上巨虛), Xuanzhong (GB39, 懸鐘), and Taichong (LR3, 太冲) acupuncture points.

Arm 1: Conservative therapy + 2 Hz electroacupuncture at the above acupuncture points (n=32).

Arm 2 : Conservative therapy + 120 Hz electroacupuncture at the above acupuncture points (n=30).

6. Main outcome measures

Motor evoked potentials (MEP), National Institutes of Health Stroke Scale (NIHSS), Modified Barthel Index (MBI), and Modified Motor Assessment Scale (MMAS).

7. Main results

There was significantly more improvement in Arm 1 in latency, central motor conduction time (CMCT), and amplitude ($P=0.008$, 0.002 , and 0.002 , respectively), but not in NIHSS, MBI, and MMAS. There was more improvement in Arm 2 than Arm 1 in NIHSS, MBI, and MMAS, but the between-group difference was without significance.

8. Conclusions

Low frequency electroacupuncture is more effective than high frequency electroacupuncture for dyspraxia after stroke.

9. Safety assessment in the article

Not mentioned.

10. Abstractor's comments

High frequency electroacupuncture acts on the circulation, and low frequency electroacupuncture acts on the sympathetic nervous system. In this study, the difference in therapeutic effects between high and low frequency electroacupuncture suggest that the latter acts on the central nervous system. However, as the treatment period was short, a large scale study is needed.

11. Abstractor and date

Go HY, 18 July 2010.