9. Cardiovascular Diseases

Reference

Hong JW, Choi CM, Park YM, et al. The effect of 2 Hz vs. 120 Hz frequency electrical acupuncture point stimulation on motor recovery after stroke by motor evoked potential study. *Daehan-Hanbang-Naegwa-Hakhoeji (Korean Journal of Oriental Internal Medicine)* 2006; 27(1): 265–75 (in Korean with English abstract).

1. Objectives

To evaluate the effect of electroacupuncture at different frequencies on motor function recovery 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 hospitalized 1 week to 1 month after onset (n=42).

5. Intervention

Stimulation at the Hegu (LI4, 合谷), Quchi (LI11, 曲池), Shousanli (LI10, 手三里), and Waiguan (TE5, 外關) acupuncture points of the upper extremity on the affected side. Stimulation at the Zusanli (ST36, 足三里), Shangjuxu (ST37, 上巨虚), Xuanzhong (GB39, 懸鐘), and Taichong (LR3, 太冲) acupuncture points of the lower extremity on the affected side.

Arm 1: Low frequency (2 Hz) electroacupuncture point stimulation for 2 weeks (n=21).

Arm 2: High frequency (120 Hz) electroacupuncture point stimulation for 2 weeks (n=21).

6. Main outcome measures

General items (personal details and hypertension, diabetes mellitus, history of present illness, biochemical tests), Motor Evoked Potential (MEP), National Institutes of Health Stroke Scale (NIHSS) score, Modified Barthel Index (MBI), Modified motor assessment scale (MMAS).

7. Main results

MEP was significantly more improved in Arm 1 than in Arm 2. Although low frequency treatment (compared to high frequency treatment) improved NIHSS, MBI, and MMAS scores, the betweengroup differences in these were not significant.

8. Conclusions

Low frequency electroacupuncture point stimulation is more effective for restoring motor function after stroke.

9. Safety assessment in the article

Not mentioned

10. Abstractor's comments

This study evaluated the effect of low and high frequency electroacupuncture point stimulation on motor function recovery after stroke. Low frequency stimulation had more effect on the central nervous system. However, the study period was short, and it is thought that a long-term study with a large number of patients is needed.

11. Abstractor and date

Go HY, 18 July 2010.