6. Nervous System Diseases

Reference

Kim HB, Lee MH, Lee SY, et al. The comparative study on the effect of constitution-dependent acupuncture treatment for idiopathic Parkinson's disease on heart rate variability. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2007; 24(3): 163–74 (in Korean with English abstract).

1. Objectives

To evaluate the effect of constitution-dependent acupuncture on heart rate variability (HRV) of patients with idiopathic Parkinson's disease.

2. Design

Randomized controlled trial (RCT).

3. Setting

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

4. Participants

Fifty-six patients with idiopathic Parkinson's disease.

5. Intervention

Arm 1: Constitution-dependent acupuncture treatment group (test group, n=8).

Arm 2: Acupuncture point acupuncture treatment group (standard group, n=16).

Arm 3: Control group (n=12).

Nineteen subjects dropped out during the trial.

6. Main outcome measures

HRV parameters (standard deviation of normal to normal RR intervals [SDNN], total power [TP], low frequency [LF], high frequency [HF] norm, etc.)

7. Main results

- 1) In the test group, Acupuncture treatment caused a significant change in SDNN, TP, LF, and HF norm values.
- 2) In the standard group, acupuncture treatment caused a significant change in SDNN, TP, LF values.
- 3) Covariate analysis revealed a statistically significant difference in SDNN and LF values. There was a significant difference in SDNN between the test group and standard group, and between the test group and control group, and a significant difference in LF between the test group and control group.

8. Conclusions

Constitution-dependent acupuncture is very effective in patients with Parkinson's disease.

9. Safety assessment in the article

Not mentioned.

10. Abstractor's comments

This randomized controlled trial evaluates the effect of constitution-dependent acupuncture on the heart rate variability (HRV) of patients with idiopathic Parkinson's disease. This study assessed the state of the autonomic nervous system and the effect of acupuncture on HRV parameters, which are considered to be surrogate measures of the severity of Parkinson's disease symptoms. However, the number of subjects in each group was small, and the difference in HRV parameters between constitution-dependent acupuncture and acupuncture at the Taichong (LR3, \pm), Yanglingquan (GB34, 陽陵泉), and Zusanli (ST36, $\pm \pm$) acupuncture points was insignificant. More indepth studies of these differences in patients with Parkinson's disease treated with various acupuncture therapies are needed.

11. Abstractor

Lee EJ, 26 May 2010.