

## 9. Cardiovascular Diseases

### Reference

Lee SH, Kim EJ, Kim LD, et al. The effect of intradermal acupuncture on the patients with the insomnia after stroke. *Daehan-Hanbang-Naegwa-Hakhoeji (Korean Journal of Oriental Internal Medicine)* 2004; 25(1): 136–46 (in Korean with English abstract).

### 1. Objectives

To evaluate the efficacy of intradermal acupuncture for insomnia after stroke.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

KyungHee Oriental Hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

The patients were hospitalized between November 2002 to July 2003, diagnosed as having cerebral infarction and cerebral hemorrhage, and insomnia reflected by an Insomnia Severity Index (ISI) >15 for 3 consecutive days (n=30).

### 5. Intervention

Arm 1: Intradermal acupuncture treatment at the Shenmen (HT7, 神門) and Neiguan (PC6, 內關) acupoints (n=15).

Arm 2: Control group. Needle attached but not inserted at the Shenmen (HT7, 神門) and Neiguan (PC6, 內關) acupuncture points (n=15).

Two subjects dropped out during the study.

### 6. Main outcome measures

Score on Morning Questionnaire (MQ), ISI, and Athens Insomnia Scale (AIS).

### 7. Main results

- 1) ISI and AIS scores on total sleep time, sleep quality, condition on waking, ability to concentrate, and sleepiness in the morning were significantly improved in Arm 1 compared to Arm 2.
- 2) In treatment group, non-responders complained of nausea, halitosis, belching, and acid regurgitation, and abundant expectoration, while responders complained of palpitation, oppressive feeling in the chest, and somniphobia (fear of sleep).

### 8. Conclusions

The intradermal acupuncture treatment at the Shenmen and Neiguan acupuncture points can be used to treat insomnia in patients with stroke.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluated intradermal acupuncture treatment at the Shenmen (HT7, 神門) and Neiguan (PC6, 內關) acupuncture points for insomnia in 30 patients after stroke who were diagnosed as having cerebral infarction, cerebral hemorrhage, and insomnia (ISI over 15) for 3 consecutive days. In conclusion, total sleep time, sleep quality, etc. were significantly improved in Arm 1 compared with Arm 2. The results suggest that this treatment can be used for insomnia after stroke.

### 11. Abstractor

Cho SH, 13 July 2010.