

## 9. Cardiovascular Diseases

### Reference

Lee SY, Baek YH, Park SU, et al. Intradermal acupuncture on Shen-Men and Nei-Kuan acupoints improves insomnia in stroke patients by reducing the sympathetic nervous activity: a randomized clinical trial. *American Journal of Chinese Medicine* 2009; 37(6): 1013–21.

### 1. Objectives

To evaluate the effectiveness of the intradermal acupuncture at the Shenmen (HT7, 神門) and Neiguan (PC6, 內關) acupuncture points for insomnia.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

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

### 4. Participants

Patients were hospitalized between November 2007 and August 2008, diagnosed as having cerebral infarction and cerebral hemorrhage, and insomnia reflected by Insomnia Severity Index (ISI) >15 for 3 consecutive days (n=52).

### 5. Intervention

Arm 1: Intradermal acupuncture treatment at the Shenmen (HT7, 神門) and Neiguan (PC6, 內關) acupuncture points (n=27).

Arm 2: Control group. Accupuncture needle attached but not inserted at the Shenmen (HT7, 神門) and Neiguan (PC6, 內關) acupuncture points (n=25).

### 6. Main outcome measures

Score on ISI, Athens Insomnia Scale (AIS).

### 7. Main results

ISI and AIS scores were significantly increased in Arm 1 compared to Arm 2. In addition, night hypertension and heart rate variability (LF/HF ratio) were significantly decreased.

### 8. Conclusions

The sympathetic nerve activity was stabilized in Arm 1. Therefore, intradermal acupuncture treatment at the Shenmen and Neiguan acupuncture points is effective for insomnia after stroke.

### 9. Safety assessment in the article

The blood pressure and heart rate variability were checked.

### 10. Abstractor's comments

This study examined the effectiveness of intradermal acupuncture for insomnia after stroke. Fifty-two patients previously diagnosed as having cerebral infarction and cerebral hemorrhage, and insomnia (ISI >15) for 3 consecutive days were allocated to Arm 1 or Arm 2. Treatment decreased night hypertension and heart rate variability but increased ISI and AIS scores, suggesting that it can be used for insomnia after stroke.

### 11. Abstractor

Cho SH, 13 July 2010.