

9. Cardiovascular Diseases

Reference

Bae HS, Shin AS, Park SU, et al. Effects of acupuncture at ST36 on blood pressure and endothelial dependent vasodilation in hypertensive patients. *Daehan-Hanbang-Naegwa-Hakhoeji (Korean Journal of Oriental Internal Medicine)* 2008; 29(3): 657–65 (in Korean with English abstract).

1. Objectives

To assess the effects of acupuncture at the Zusanli (ST 36, 足三里) acupuncture point on blood pressure and endothelial dependent vasodilation.

2. Design

Randomized controlled trial (RCT).

3. Setting

One Oriental hospital (Kyunghee University Hospital at Gangdong), Republic of Korea.

4. Participants

Twenty-four male and female patients (age, 18–70 years) who were diagnosed as having essential hypertension and receiving antihypertensive treatment.

5. Intervention

Arm 1: Acupuncture treatment at the Zusanli (ST36, 足三里) acupuncture point (n=12).

Arm 2: Sham acupuncture treatment group (n=12).

6. Main outcome measures

% Flow-mediated dilation (FMD), hemodynamometry.

7. Main results

There was no significant between-group difference in blood pressure. FMD increased significantly from $9.5 \pm 2.0\%$ to $11.1 \pm 2.2\%$ after acupuncture at the Zusanli (ST36, 足三里) acupuncture point, but remained unchanged ($9.2 \pm 2.9\%$ to 9.8 ± 2.3 ; $P = 0.091$) after control treatment.

8. Conclusions

Acupuncture at the Zusanli (ST36, 足三里) acupuncture point may improve endothelial cell dysfunction.

9. Safety assessment in the article

Not mentioned.

10. Abstractor's comments

Previous studies have suggested that acupuncture or moxibustion at the Zusanli acupuncture point is antihypertensive. Blood pressure was not changed by acupuncture treatment at the Zusanli. Thus, the subjects of the study took antihypertensive medication and their average blood pressures were low (132.6 ± 13.6 mmHg in treatment group and 129.2 ± 17.1 mmHg in control group). However, this study found that acupuncture at the Zusanli acupuncture point significantly increased the FMD and improved endothelial cell dysfunction. An additional study with more cases and hospitals are needed.

11. Abstractor

Go HY, 18 July 2010.