

Does Acupuncture Reduce Stress Over Time?

A Clinical Heart Rate Variability Study in Hypertensive Patients

ABSTRACT

Background: Heart Rate Variability (HRV), a noninvasive autonomic measure, has been applied to acupuncture interventions in controlled academic settings comparing points used, the type of stimulation, or the HRV parameter measured.

There is evidence that acupuncture decreases the stress response in both human and animal subjects, and can increase HRV in the short term (minutes to hours.)

Objectives: To explore an array of HRV parameters during acupuncture sessions and over the course of treatment (weeks to months) in a series of patients being treated for hypertension.

Design, Setting and Patients: Retrospective, uncontrolled case study of patients presenting to a private Acupuncture clinic.

Intervention: Patients received manual body acupuncture prescribed by the tenets of Traditional Chinese Medicine (TCM) and published protocols for hypertension treatment. Heart rate was monitored during and after needle placement. The tracings were then analyzed with the Vivosense HRV analysis system.

Main outcome measures: Outcomes were patients' blood pressure measurements and HRV LF/HF (low frequency to high frequency ratio).

Results: Patients tended to show an increase in their HRV during treatment after needling, and in some instances an increase in HRV over weeks to months.

Conclusions: Some patients' HRV increased over weeks to months during the course of acupuncture treatment for hypertension as evidenced by a decrease in their LF/HF ratio. This would indicate a relative decrease in their physiological stress.

Key words: Acupuncture and Heart Rate Variability, Acupuncture and Hypertension, Acupuncture Physiology

