

Blood pressure, heart rate and sympathetic nerve activity were measured in each patient

immediately after taking the test. Results showed that SNS activity increased approximately 25% as a result of the mental stress.

After the test, the researchers divided the patients into three groups. The patients received either authentic acupuncture delivered for 20 minutes at established acupuncture points; sham acupuncture delivered at non-acupuncture points; or no-needle acupuncture, in which the patients were told they'd receive acupuncture, but were in fact only tapped by a needle holder on the back of the neck.

The mental stress test was repeated after the acupuncture treatments, with the same measurements taken at the conclusion of the second test. While patients in the sham and no-needle group experienced the same increases in heart rate, blood pressure and SNS activity after taking the second test as they had after taking the test the first time, patients in the authentic acupuncture group showed no increase in SNS activity.

"Blood pressure and heart rate were unaffected by the acupuncture, and both increased after mental stress testing in all groups, but sympathetic nerve activation was significantly reduced in the (authentic) acupuncture group," stated Middlekauff.

This result, the researchers believe, showed that there was no placebo effect in occurrence. Thus, they concluded that acupuncture "is sympatho-inhibitory in patients with advanced heart failure."

The researchers admitted that it is far too early to determine whether acupuncture treatments could alter the course of heart failure, or to recommend it as a routine treatment for patients with the condition. Still, Middlekauff hailed the research as "a promising first step" and called for larger, longer trials to determine acupuncture's effectiveness.

"We need to do more studies in large patient populations and repeat the acupuncture procedures over a period of weeks, rather than just once, as we did in our study," she said. "But in clinical experience, acupuncture has been used successfully and with long-range results in improving hypertension, and it may also be beneficial in lowering sympathetic nerve activity."

"Real acupuncture essentially eliminated the sympathetic response in heart failure patients after only one session. Now I would like to see what a full course would do."

References

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