

Acupuncture Reverts Heart Arrhythmias To Normal

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University of Minnesota (Minneapolis) researchers find acupuncture effective for the treatment of cardiac arrhythmias. In a meta-analysis of eight independent investigations, acupuncture had an 87% – 100% success rate for converting patients to a “normal sinus rhythm after acupuncture.” Based on the findings, the University of Minnesota researchers recommend additional studies, including those with long-term follow-up examinations, to confirm the results. [1]



Beijing University researchers produced similar findings. They concluded that “CA [conventional acupuncture] may be a useful and safe alternative or additive approach to AADs [anti-arrhythmia drugs] for cardiac arrhythmia, especially in VPB [ventricular premature beat] and Af [atrial fibrillation] patients, which mainly based on a pooled estimate and result from 1 study with higher methodological quality.” [2] The Beijing University researchers note that additional studies are required to confirm the results in order to produce a more “robust conclusion.”

Additional research supports the aforementioned evidence. In an independent investigation, researchers conclude, “Acupuncture is a safe and effective therapy for conversion of paroxysmal atrial fibrillation and atrial flutter.” [3] In the study, a comparison between acupuncture and amiodarone (an antiarrhythmic medication) was made. One group received acupuncture at the following acupoints:

- **Neiguan (PC6)**
- **Shenmen (HT7)**
- **Danzhong (CV17)**

Another group received intravenous injections of amiodarone. The group receiving acupuncture had an 85% total effective rate. The drug group had a 67.5% total effective rate. Conversion times were significantly faster in the acupuncture group than the drug group. Acupuncture produced a 39.6 (± 13.7) minute average conversion time and amiodarone produced a 50.1 (± 14.8) minute conversion time. [4]

There are several tools available to physicians for the purposes of restoring a normal rhythm to the heart. Synchronized electrical cardioversion, defibrillation, and chemical cardioversion are standard therapeutic measures for the treatment of cardiac arrhythmias including atrial fibrillation, atrial flutter, and ventricular tachycardia. The aforementioned research indicates that acupuncture is another useful tool for restoring a healthy heart rhythm.

Acupuncture has also been found effective for the prevention of abnormal heart rhythms. Zhu et al. determined that acupuncture applied to acupoint Neiguan (PC6) prevents atrial fibrillation and exerts an anti-arrhythmia effect. In a groundbreaking laboratory experiment, the researchers proved that acupuncture prevents atrial fibrillation through restoration and remodeling of the right atrial appendage. [5] Zhu et al. add that acupuncture at PC6 “could effectively prevent the onset of arrhythmia and restore the sinus rhythm in AF [atrial fibrillation] rats.”

Zhu et al. conclude that acupuncture reduces the severity of “focal interrupted cardiomyocytes, myolysis, interstitial edema and increased extracellular space.” Results were confirmed with electrocardiograms, histological examinations, and ultrastructure analyses. Zhu et al. concluded, “Considering that acupuncture was safe, effective, without any pro-arrhythmic effect compared with the classical pharmacological therapy, this traditional Chinese medicine had a potential to become a more mainstream complementary intervention in the treatment of atrial fibrillation.” [6]

The importance of the findings cannot be underestimated. In a report produced by the Heart Rhythm Society, researchers note that over 33 million people have atrial fibrillation worldwide and there are approximately 5 million new cases every year. [7] In another report by

the Heart Rhythm Society, the authors note, “Recent small studies suggest that neuromodulation through skin or subcutaneous tissues may also help to control AF using either a transcutaneous approach or acupuncture.” [8] The Heart Rhythm Society authors include Dr. Robert M. Califf (former US FDA Commissioner) and doctors from Harvard Medical School (Massachusetts), Johns Hopkins University School of Medicine (Maryland), Duke University (North Carolina), and University of California (Davis, California).

The Heart Rhythm Journal publication cites the work of Lomuscio et al. that was published in the Journal of Cardiovascular Electrophysiology. The study concludes, “Our data indicate that acupuncture treatment prevents arrhythmic recurrences after cardioversion in patients with persistent AF. This minimally invasive procedure was safe and well tolerated.” [9] The results were based on a highly controlled clinical investigation. Lomuscio et al. applied identical acupuncture points to all patients in the acupuncture treatment group:

- **Neiguan (PC6)**
- **Shenmen (HT7)**
- **Xinshu (BL15)**

Acupuncture was applied once per week for a total of 10 acupuncture sessions per patient. Results were compared with patients in a sham acupuncture group, a control group (neither acupuncture nor antiarrhythmic therapy), and a group receiving amiodarone treatment. In a 12 month follow-up examination, amiodarone patients had a 27% recurrence rate of atrial fibrillation. Patients receiving true acupuncture had a 35% recurrence rate, sham acupuncture patients had a 69% recurrence rate, and the control group had a 54% recurrence rate.

A dosage dependent investigation may highlight superior clinical protocols for the application of acupuncture. For example, instead of limiting patients to weekly acupuncture visits capped at 10 total visits, a more realistic dosage of 15 – 30 acupuncture visits over a shorter period of time may produce superior patient outcomes. Additional investigations including large sample sizes across diverse populations is warranted given the existing evidence and medical necessity for finding a solution to cardiac arrhythmias.

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