



<b>Title</b>	<b>Acupuncture of Chronic Headache Disorders in Primary Care: Randomized Controlled Trial and Economic Analysis</b>
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<b>Reference</b>	Health Technol Assess 2004;8(48). November 2004. <a href="http://www.hta.ac.uk/execsumm/summ848.htm">www.hta.ac.uk/execsumm/summ848.htm</a>

## Aim

To determine the effects of a policy of “use acupuncture” on headache, health status, medication use, days off sick, and resource use in chronic headache patients as compared to a policy of “avoid acupuncture”, and to determine the cost effectiveness of acupuncture.

## Conclusions and results

The study randomized 401 patients, and 301 provided headache diaries at one year. Dropout was similar between groups and groups were well balanced at baseline. Headache score at 12 months, the primary endpoint, was lower in the acupuncture group (16.2, SD 13.7, n=161, 34% reduction from baseline) than in controls (22.3, SD 17.0, n=140, 16% reduction from baseline). The adjusted difference between means is 4.6 (95% confidence interval 2.2 to 7.0; p=0.0002). This result is robust to sensitivity analysis incorporating imputation for missing data. Patients in the acupuncture group experienced the equivalent of 22 fewer days of headache per year (8 to 38). SF-36 data favored acupuncture, although differences reached significance only for physical role functioning, energy, and change in health. Compared with controls, patients randomized to acupuncture used 15% less medication (p=0.02), made 25% fewer visits to general practitioners (p=0.10), and took 15% fewer days off sick (p=0.2). Total costs during the 1-year period of the study were on average higher for the acupuncture group (£403; \$768; €598) than for controls (£217) because of the acupuncture practitioners' costs. The mean health gain from acupuncture during the 1-year trial was 0.021 QALYs, leading to a base case estimate of GBP 9180 per QALY gained. This result was robust to sensitivity analysis. Cost per QALY dropped substantially when the analysis incorporated likely QALY differences for the years after the trial.

## Recommendations

Acupuncture leads to persisting, clinically relevant, benefits for primary care patients with chronic headache, particularly migraine. It is relatively cost effective compared to several other interventions provided by the National Health Service (NHS).

## Methods

Patients with chronic headache, predominantly migraine, were recruited for general practices in England and Wales. Patients completed baseline diaries and were allocated using randomized minimization to receive up to 12 acupuncture treatments over 3 months, or to usual care control. Headache and health status diaries were completed at 3 months and 12 months after randomization; resource use diaries were completed every 3 months.

## Further research/reviews required

The optimum methods of acupuncture remain unknown and require systematic research. Further studies might examine the duration of acupuncture effects beyond 1 year and the relative benefit to patients with migraine as compared to tension-type headache. Trials are also warranted examining the effectiveness and cost effectiveness of acupuncture in headache patients receiving more aggressive pharmacologic management.