



BMJ 2004;328:744 (27 March), doi:10.1136/bmj.38029.421863.EB (published 15 March 2004)

Primary care

Acupuncture for chronic headache in primary care: large, pragmatic, randomised trial

Andrew J Vickers, *assistant attending research methodologist*¹, **Rebecca W Rees**, *research officer*², **Catherine E Zollman**, *general practitioner*³, **Rob McCarney**, *research officer*⁴, **Claire M Smith**, *senior trials coordinator*⁵, **Nadia Ellis**, *lecturer*⁶, **Peter Fisher**, *director of research*⁷, **Robbert Van Haselen**, *deputy director of research*⁷

¹ Integrative Medicine Service, Biostatistics Service, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, NY, NY 10021, ² Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre), Social Science Research Unit, Institute of Education, London WC1H 0NS, ³ Montpellier Health Centre, Bristol BS6 5PT, ⁴ Department of Psychological Medicine, Imperial College London, London W2 1PD, ⁵ Academic Rheumatology, Weston Education Centre, King's College, London SE5 9RJ, ⁶ Department of Health and Social Sciences, Coventry University, Coventry CV1 5FB, ⁷ Royal London Homeopathic Hospital, London W1W 5PB

Correspondence to: A J Vickers vickersa@mskcc.org

Objective To determine the effects of a policy of "use **acupuncture**" on headache, health status, days off sick, and use of resources in patients with chronic headache compared with a policy of "avoid **acupuncture**."

Design Randomised, controlled trial.

Setting General practices in England and Wales.

Participants 401 patients with chronic headache, predominantly migraine.

Interventions Patients were randomly allocated to receive up to 12 **acupuncture** treatments over three months or to a control intervention offering usual care.

Main outcome measures Headache score, SF-36 health status, and use of medication were assessed at baseline, three, and 12 months. Use of resources was assessed every three months.

Results Headache score at 12 months, the primary end point, 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 favoured **acupuncture**, although differences reached significance only for physical role functioning, energy, and change in health. Compared with controls, patients randomised 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).

Conclusions **Acupuncture** leads to persisting, clinically relevant benefits for primary care patients with chronic headache, particularly migraine. Expansion of NHS **acupuncture** services should be considered.

CiteULike
 Complere
 Connotea
 Del.icio.us
 Digg
 Reddit
 Technorati
 What's this?

Relevant Articles

Acupuncture in patients with tension-type headache: randomised controlled trial

Dieter Melchart, **Andrea** Streng, **Andrea** Hoppe, Benno Brinkhaus, Claudia Witt, Stefan Wagenpfeil, Volker Pfaffenrath, Michael Hammes, Josef Hummelsberger, Dominik Irnich, Wolfgang Weidenhammer, Stefan N Willich, **and** Klaus Linde
BMJ 2005 331: 376-382. [Abstract] [Full Text] [PDF]

Acupuncture improves headache and saves money

BMJ 2004 328: 0. [Full Text]

Related external webpages:

NHS Health Technology Assessment Programme

This article has been cited by other articles:

- Avogo, W., Frimpong, J. A, Rivers, P. A, Kim, S. S (2008). The effects of health status on the utilization of complementary **and** alternative medicine. *Health Education Journal* 67: 258-275 [Abstract]
- Kemper, K. J., Vohra, S., Walls, R., the Task Force on Complementary **and** Alternative Me, , the Provisional Section on Complementary, Holistic, (2008). The Use of Complementary **and** Alternative Medicine **in** Pediatrics. *Pediatrics* 122: 1374-1386 [Abstract] [Full text]
- Sun, Y., Gan, T. J. (2008). **Acupuncture** for the Management of Chronic Headache: A Systematic Review. *Anesth. Analg.* 107: 2038-2047 [Abstract] [Full text]
- Shang, C. (2007). Prospective Tests on Biological Models of **Acupuncture**. *Evid Based Complement Alternat Med* 0: nem122v1-nem122 [Abstract] [Full text]
- Doyle, D. J. (2007). Understanding the open access data movement. *Canadian J. Anesthesia* 54: 949-950 [Full text]
- Johnston, M. F., Yang, C., Hui, K.-K., Xiao, B., Li, X., Rusiewicz, A. (2007). **Acupuncture** for Chemotherapy-Associated Cognitive Dysfunction: A Hypothesis-Generating Literature Review to **Inform Clinical Advice**. *Integr Cancer Ther* 6: 36-41 [Abstract]
- Price, S., Lewith, G., Thomas, K. (2006). **Acupuncture** care for breast cancer patients during chemotherapy: a feasibility study.. *Integr Cancer Ther* 5: 308-314 [Abstract]
- Macklin, E. A., Wayne, P. M., Kalish, L. A., Valaskatgis, P., Thompson, J., Pian-Smith, M. C.M., Zhang, Q., Stevens, S., Goertz, C., Prineas, R. J., Buczynski, B., Zusman, R. M. (2006). Stop Hypertension With the **Acupuncture** Research Program (SHARP): Results of a Randomized, Controlled Clinical Trial. *Hypertension* 48: 838-845 [Abstract] [Full text]
- Hui, K.-K., Hui, E. K., Johnston, M. F. (2006). The potential of a person-centered approach **in** caring for patients with cancer: a perspective from the UCLA center for East-west medicine.. *Integr Cancer Ther* 5: 56-62 [Abstract]
- Scheller, J. (2005). Role for Complementary **and** Alternative Treatments **in** Epilepsy. *Arch Neurol* 62: 1471-1472 [Full text]
- Melchart, D., Streng, A., Hoppe, A., Brinkhaus, B., Witt, C., Wagenpfeil, S., Pfaffenrath, V., Hammes, M., Hummelsberger, J., Irnich, D., Weidenhammer, W., Willich, S. N, Linde, K.

(2005). **Acupuncture in patients with tension-type headache: randomised controlled trial.** *BMJ* 331: 376-382 [Abstract] [Full text]

- Ruggie, M. (2005). **Mainstreaming Complementary Therapies: New Directions In Health Care.** *Health Aff (Millwood)* 24: 980-990 [Abstract] [Full text]
- Linde, K., Streng, A., Jurgens, S., Hoppe, A., Brinkhaus, B., Witt, C., Wagenpfeil, S., Pfaffenrath, V., Hammes, M. G., Weidenhammer, W., Willich, S. N., Melchart, D. (2005). **Acupuncture for Patients With Migraine: A Randomized Controlled Trial.** *JAMA* 293: 2118-2125 [Abstract] [Full text]
- (2004). **Acupuncture Helps Chronic Headache.** *Journal Watch Dermatology* 2004: 7-7 [Full text]
- (2004). **Acupuncture Helps Chronic Headache.** *JWatch Psychiatry* 2004: 10-10 [Full text]
- (2004). **Acupuncture Helps Chronic Headache.** *JWatch General* 2004: 1-1 [Full text]

Rapid Responses:

Read all Rapid Responses

Acupuncture is not a placebo intervention.

Edwin H Klimek

bmj.com, 16 Mar 2004 [Full text]

Yes It's True

Ned Hoke

bmj.com, 18 Mar 2004 [Full text]

Acupuncture and clinical outcome

Edzard Ernst

bmj.com, 19 Mar 2004 [Full text]

Re: Acupuncture and clinical outcome

John P Heptonstall

bmj.com, 19 Mar 2004 [Full text]

A lowering of standards

David W. Ramey

bmj.com, 19 Mar 2004 [Full text]

Disappointment at lack of genuine control limb

Nicholas Charles Mansfield

bmj.com, 24 Mar 2004 [Full text]

The salubrious effect of needle sticks.

Robert A. Da Prato, M.D.

bmj.com, 24 Mar 2004 [Full text]

Re: The salubrious effect of needle sticks.

John P Heptonstall

bmj.com, 25 Mar 2004 [Full text]

Reducing the cost of headaches

Ellen CG Grant

bmj.com, 26 Mar 2004 [Full text]

Acupuncture for headache: Questionable conclusions

Alan H. Morris

bmj.com, 26 Mar 2004 [Full text]

NNTs matter

Carlos Cuello

bmj.com, 26 Mar 2004 [Full text]

Re: Reducing the cost of headaches

John P Heptonstall

bmj.com, 27 Mar 2004 [Full text]

Pleasure and headache

Tom Hughes-Davies

bmj.com, 28 Mar 2004 [Full text]

Acupuncture but Design Studies....

Felipe C. Cepeda, et al.

bmj.com, 29 Mar 2004 [Full text]

Placebo ethics

David Brookman

bmj.com, 29 Mar 2004 [Full text]

Acupuncture for chronic headache in primary care: patients' attitude towards acupuncture must not be forgotten

Ulrich Ronellenfitsch

bmj.com, 29 Mar 2004 [Full text]

Re: Placebo ethics

John P Heptonstall

bmj.com, 30 Mar 2004 [Full text]

not scientifically convincing at all

Daniel K Ng, et al.

bmj.com, 30 Mar 2004 [Full text]

not scientifically convincing at all: updated

Daniel K Ng, et al.

bmj.com, 30 Mar 2004 [Full text]

High Type 1 error of a pragmatic trial

Jongbae Park

bmj.com, 31 Mar 2004 [Full text]

Re: not scientifically convincing at all: updated

John P Heptonstall

bmj.com, 1 Apr 2004 [Full text]

Would this trial design be acceptable for a medicine?

Malcolm J VandenBurg

bmj.com, 4 Apr 2004 [Full text]

Re: Would this trial design be acceptable for a medicine?

John P Heptonstall

bmj.com, 4 Apr 2004 [Full text]

Weekly Visits for 3 months help patients with chronic headache?

Victor Patterson, et al.

bmj.com, 7 Apr 2004 [Full text]

Re: Weekly Visits for 3 months help patients with chronic headache?

John P Heptonstall

bmj.com, 9 Apr 2004 [Full text]

Acupuncture as prophylactic treatment for 'chronic headache'

Guus G Schoonman, et al.

bmj.com, 13 Apr 2004 [Full text]

Re: Acupuncture as prophylactic treatment for 'chronic headache'

John P Heptonstall

bmj.com, 20 Apr 2004 [Full text]

What was trialed?

John Parkinson

bmj.com, 5 May 2004 [Full text]

Correction

David W. Ramey

bmj.com, 19 May 2004 [Full text]

Response from the authors

Andrew J Vickers, et al.

bmj.com, 19 May 2004 [Full text]

Banjo lessons, and other interventions

David W. Ramey

bmj.com, 20 May 2004 [Full text]

Accurate Accupuncture Study

Donald Hall

bmj.com, 4 Jan 2005 [Full text]

Contact us - Privacy policy - Web site terms & conditions - Revenue sources - Site map
HighWire Press - Feedback - Help - © 2004 BMJ Publishing Group Ltd.