

Cochrane Database of Systematic Reviews

Acupuncture for glaucoma (Review)

Law SK, Li T

Law SK, Li T.
Acupuncture for glaucoma. *Cochrane Database of Systematic Reviews* 2013, Issue 5. Art. No.: CD006030.
DOI: 10.1002/14651858.CD006030.pub3.

www.cochranelibrary.com



[Intervention Review]

Acupuncture for glaucoma

Simon K Law¹, Tianjing Li²

¹Jules Stein Eye Institute, University of California, Los Angeles, Los Angeles, California, USA. ²Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USA

Contact address: Simon K Law, Jules Stein Eye Institute, University of California, Los Angeles, 100 Stein Plaza 2-235, Los Angeles, California, 90095, USA. Law@jsei.ucla.edu.

Editorial group: Cochrane Eyes and Vision Group.

Publication status and date: New search for studies and content updated (no change to conclusions), published in Issue 5, 2013.

Citation: Law SK, Li T. Acupuncture for glaucoma. *Cochrane Database of Systematic Reviews* 2013, Issue 5. Art. No.: CD006030. DOI: 10.1002/14651858.CD006030.pub3.

Copyright © 2013 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd.

ABSTRACT

Background

Glaucoma is a multifactorial optic neuropathy characterized by an acquired loss of retinal ganglion cells at levels beyond normal agerelated loss and corresponding atrophy of the optic nerve. Although many treatments are available to manage glaucoma, glaucoma is a chronic condition. Some patients may seek complementary or alternative medicine approaches such as acupuncture to supplement their regular treatment. The underlying plausibility of acupuncture is that disorders related to the flow of Chi (the traditional Chinese concept translated as vital force or energy) can be prevented or treated by stimulating relevant points on the body surface.

Objectives

The objective of this review was to assess the effectiveness and safety of acupuncture in people with glaucoma.

Search methods

We searched the Cochrane Central Register of Controlled Trials (CENTRAL) (which contains the Cochrane Eyes and Vision Group Trials Register) (*The Cochrane Library* 2012, Issue 12), Ovid MEDLINE, Ovid MEDLINE In-Process and Other Non-Indexed Citations, Ovid MEDLINE Daily, Ovid OLDMEDLINE (January 1946 to January 2013), EMBASE (January 1980 to January 2013), Latin American and Caribbean Literature on Health Sciences (LILACS) (January 1982 to January 2013), Cumulative Index to Nursing and Allied Health Literature (CINAHL) (January 1937 to January 2013), ZETOC (January 1993 to January 2013), Allied and Complementary Medicine Database (AMED) (January 1985 to January 2013), the *meta*Register of Controlled Trials (*m*RCT) (www.controlled-trials.com), ClinicalTrials.gov (www.clinicaltrials.gov), the WHO International Clinical Trials Registry Platform (ICTRP) (www.who.int/ictrp/search/en) and the National Center for Complementary and Alternative Medicine web site (NCCAM) (http://nccam.nih.gov). We did not use any language or date restrictions in the search for trials. We last searched the electronic databases on 8 January 2013 with the exception of NCCAM which was last searched on 14 July 2010. We also handsearched Chinese medical journals at Peking Union Medical College Library in April 2007.

We searched the Chinese Acupuncture Trials Register, the Traditional Chinese Medical Literature Analysis and Retrieval System (TCMLARS), and the Chinese Biological Database (CBM) for the original review; we did not search these databases for the 2013 review update.

Selection criteria

We included randomized controlled trials (RCTs) in which one arm of the study involved acupuncture treatment.

Data collection and analysis

Two authors independently evaluated the search results and then full text articles against the eligibility criteria. We resolved discrepancies by discussion.



Main results

We included one completed and one ongoing trial, and recorded seven trials awaiting assessment for eligibility. These seven trials were written in Chinese and were identified from a systematic review on the same topic published in a Chinese journal. The completed trial compared auricular acupressure—a nonstandard acupuncture technique—with the sham procedure for glaucoma. This trial is rated at high risk of bias for masking of outcome assessors, unclear risk of bias for selective outcome reporting, and low risk of bias for other domains. The difference in intraocular pressure (measured in mm Hg) in the acupressure group was significantly less than that in the sham group at four weeks (-3.70, 95% confidence interval [CI] -7.11 to -0.29 for the right eye; -4.90, 95% CI -8.08 to -1.72 for the left eye), but was not statistically different at any other follow-up time points, including the longest follow-up time at eight weeks. No statistically significant difference in visual acuity was noted at any follow-up time points. The ongoing trial was registered with the International Clinical Trials Registry Platform (ICTRP) of the World Health Organization. To date this trial has not recruited any participants.

Authors' conclusions

At this time, it is impossible to draw reliable conclusions from available data to support the use of acupuncture for the treatment of glaucoma. Because of ethical considerations, RCTs comparing acupuncture alone with standard glaucoma treatment or placebo are unlikely to be justified in countries where the standard of care has already been established. Because most glaucoma patients currently cared for by ophthalmologists do not use nontraditional therapy, clinical practice decisions will have to be based on physician judgments and patient preferences, given this lack of data in the literature. Inclusion of the seven Chinese trials in future updates of this review may change our conclusions.

PLAIN LANGUAGE SUMMARY

Acupuncture as a treatment modality for patients with glaucoma

Glaucoma is a condition that damages the optic nerve and affects primarily the side vision. It is a major cause of blindness worldwide. Although many treatments are available, including eye drops, laser treatment, and surgical procedures, some patients may seek complementary or alternative medicine approaches such as acupuncture to supplement their regular treatment. This review aimed to evaluate available evidence in the findings of randomized controlled trials to assess whether acupuncture is useful and safe in treating patients with glaucoma. We included in the review one completed and one ongoing trial, and we recorded seven trials (all published in Chinese) awaiting assessment for eligibility. The completed trial was conducted in Taiwan among 33 patients. This trial compared auricular acupressure—a nonstandard acupuncture technique—versus a sham procedure (which is a fake procedure designed to resemble the real one) for glaucoma. The trial measured intraocular pressure and visual acuity during an eight-week follow-up period. The quality of this trial was not high. According to the findings of this trial, auricular acupressure lowers intraocular pressure by around 4 mm Hg for the right eye and around 5 mm Hg for the left eye at four weeks, but not significantly effective at any other time points or for any other visual outcomes. The safety of acupuncture was not examined in this trial. To date, the ongoing trial "Acupuncture for Glaucoma" has not recruited any participants. On the basis of currently available evidence, the benefit and harm of acupuncture as a therapeutic modality for glaucoma cannot be established. Inclusion of the seven Chinese trials that are awaiting assessment for eligibility in the future may change our conclusions.