Table des matières

Optic Atrophy

Atrophie optique : évaluation de l'acupuncture

1. Systematic Reviews and Meta-Analysis

☆☆☆	Evidence for effectiveness and a specific effect of acupuncture
☆☆	Evidence for effectiveness of acupuncture
☆	Limited evidence for effectiveness of acupuncture
Ø	No evidence or insufficient evidence

1.1. Zhi 2019 Ø

Zhi FY , Liu J , Ma XP , Hong J , Zhang J , Zhang D , Zhao Y , Wu LJ , Yang YT , Wu DY , Xie C , Wu LX , Zhang CH. Manual Acupuncture for Optic Atrophy: A Systematic Review and Meta-Analysis. Evid Based Complement Alternat Med. 2019. [192888].

Objectives	This systematic review aims to critically evaluate the efficacy of manual acupuncture for optic atrophy.
Methods	Eight English and Chinese databases, including Cochrane Library, Embase, PubMed, Chinese National Knowledge Infrastructure (CNKI), Wanfang Database, China Science and Technology Journal Database (VIP), and Chinese Biomedical Literature Database (CBM), as well as ongoing trials registered with the WHO International Clinical Trials Registry Platform, were searched to identify eligible randomized controlled trials (RCTs) studying manual acupuncture for optic atrophy compared to medication alone. The quality of evidence was assessed using Cochrane Collaboration's risk of bias tool. Meta-analysis was performed using Review Manager version 5.3.
Results	**Nine studies** were identified and included for meta-analysis. The meta-analysis showed significant differences in favor of manual acupuncture or manual acupuncture plus medication compared with medication alone in the following outcome measures: visual acuity (MD = 0.18, 95% CI [0.17, 0.20], P < 0.00001), mean sensitivity of visual field (MD = 2.11, 95% CI [1.90, 2.32], P < 0.00001), the latent period of P-VEP100 (MD = -6.80, 95% CI [-8.94, -4.66], P < 0.00001), the total effectiveness (264 eyes) (OR = 3.22, 95% CI [1.88, 5.51], P<0.0001), and the total effectiveness (344 participants) (OR = 4.29, 95% CI [2.56, 7.19], P < 0.00001).
Conclusion	Despite statistical advantages of manual acupuncture in the literature, due to serious methodological flaws in study design, it cannot be concluded that manual acupuncture is more effective than medicine alone. It is essential that a properly controlled clinical trial is designed and controls are established to exclude placebo effects.

1.2. Dai 2013 ☆

Dai Y, Liu M, Zhang Y, Wei S, Huang H. [Meta Analysis of acupuncture in the treatment of optic atrophy]. Journal of Central South University (Medical Science). 2013;38(3):283-90. [170627]

Objective	To evaluate the efficacy and safety of acupuncture for optic atrophy.
Methods	All the randomized controlled trials (RCTs) on optic atrophy treatment with acupuncture were included after retrieving the PubMed, Embase, Cochrane Library, CBM, CNKI, VIP, Wanfang database from their establishment to November 2012. The bibliographies of the included studies were retrieved as well. The quality of RCTs meeting the inclusion criteria was evaluated and the data were extracted. Meta-analyses were performed with Stata 11.2 software.
Results	**Thirteen RCTs involving 1180 eyes were included**. Meta-analyses showed that the effect of acupuncture or combined with medicine was superior to medicine alone in terms of total effectiveness [OR=3.281, 95% CI (2.517, 4.278)], visual acuity [3.287, 95% CI (2.193, 4.925)], and visual field [3.215, 95% CI (1.580, 6.543)]. The visual sensitivity and P-VEP test showed the similar results.
Conclusion	**Acupuncture is superior to medicine in terms of improved visual acuity, visual field and P-VEP**. However, large samples, and high-quality studies are needed for stronger evidence.

1.3. Liu 2009 ☆

Liu Mailan, Lan Lei, Tang Yong, Zeng Fang, Yin Haiyan, Huang Mei, Liang Fanrong. [An acupuncture meta-analysis for optic atrophy seven randomized controlled trials]. Neural Regeneration Research. 2009;4(12):994-1001. [164869].

Objective	To evaluate the efficacy and safety of acupuncture for optic atrophy.
Methods	DATA SOURCES: A computer-based online search was conducted in Medline (1966-2008), Embase (1986-2008), the Cochrane Library (up to 2008), Chinese Biomedical Literature Database (1975-2008), China National Knowledge Infrastructure (1994-2008), VIP Database (1989-2008), Wanfang Database (1980-2008) and the National Research Register for ongoing trials. DATA SELECTION: Randomized, controlled trials addressing acupuncture treatment for patients with optic atrophy were included in this review. Inclusion criteria evaluated all forms of acupuncture therapy, such as filiform needle, electro-acupuncture, laser-acupuncture, acupressure, and auricular-acupuncture. Comparisons between acupuncture therapy and no treatment (blank) or placebo or Chinese medicine or Western medicine, as well as between acupuncture as an adjuvant and other treatments, were included. Exclusion criteria included studies comparing different forms of acupuncture therapy, different manipulations of acupuncture, and different acupuncture prescriptions, as well as non-randomized, controlled trials and animal studies. The domain-based evaluation criteria recommended by the guidelines in Chapter 8 of the Cochrane Handbook for Systematic Reviews of Interventions 5.0.1 was used to assess quality of the included studies. According to the type of outcome index, measurement data as assessed by weighted mean difference or standardized mean difference and 95% confidence interval; numeration data was estimated by relative risk and 95% confidence interval. Heterogeneity was analyzed by Meta-analysis using RevMan 5.0 software. MAIN OUTCOME MEASURES: Improved visual acuity and visual field was sought between treatment and control groups in the included articles.

Results	**Seven randomized, controlled trials were included** after screening and application of inclusion and exclusion criteria. However, the studies were of low methodological quality and lacked comparisons between acupuncture and no treatment or placebo. Applying visual acuity as the outcome index, meta-analysis indicated: the effect of medicine combined with acupuncture was superior to the medicine alone (relative risk = 1.41,95% confidence interval 1.14-1.70, P < 0.01), the efficacy of acupuncture was better than medicine alone (relative risk =1.42, 95% confidence interval 1.14-1.77, P < 0.01). Using visual field as the other outcome index, meta-analysis revealed: effectiveness of acupuncture or acupuncture in combination with medicine was superior to medicine alone (relative risk = 1.47, 95% confidence interval 1.27-1.69, P < 0.01). The 7 included articles were incorporated in a sensitivity analysis, and the overall effect showed a significant difference (relative risk = 1.35, 95% confidence interval 1.16-1.56, P < 0.01). Acupuncture was not associated with any adverse events in any of the studies.
Conclusion	**Acupuncture therapy was determined to be superior to medicine in terms of improved visual acuity and visual field**. However, well-designed, randomized, controlled trials with adequate controls and scientific rigor are urgently needed.

1.4. Liao 2007 ~

Liao Liang, Wei Qiping. [Evidence-based medicine analysis of academic theses in China of acupuncture therapy in optic atrophy treatment]. Journal of Traditional Chinese Ophthalmology. 2007;4: 208-10. [168788].

Objective	To estimate the quality and efficacy of the academic theses of acupuncture therapy in optic atrophy treatment.
Methods	We searched CNKI, CBM disc, Wanfang (万方)database and VIP database magazines published in China, and analyzed them according to the criteria of evidence-based medicine(EBM).
Results	A total of 7 theses written in Chinese were retrieved, quantitative meta-analysis was done for **3 studies of RCTs and 4 CCTs**.
Conclusions	The existing evidence supports the combination therapy of acupuncture and drugs stronger than the therapy in which drugs were used only and the difference was significant(P<0.0001), but only 7 theses were retrieved and all of them have methodological short comings, the evidence is not convincing. There is an urgent need of well-planed, large-scale and multiple-center studies to assess the effectiveness of acupuncture under real life conditions.