



RECOMMENDED ARTICLES

In this issue of the journal, the Recommended Articles are selected from the journals citing the articles of the Journal of Acupuncture and Meridian Studies and from the Journal of Pharmacopuncture (ISSN: 1226–4849).

(1) JAMA Volume 312, Number 13, 01 October 2014, 1313–1322. <http://dx.doi.org/10.1001/jama.2014.12660>

Acupuncture for chronic knee pain: A randomized clinical trial

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Abstract

Importance: There is debate about benefits of acupuncture for knee pain.

Objective: To determine the efficacy of laser and needle acupuncture for chronic knee pain.

Design, setting, and participants: Zelen-design clinical trial (randomization occurred before informed consent), in Victoria, Australia (February 2010–December 2012). Community volunteers (282 patients aged ≥ 50 years with chronic knee pain) were treated by family physician acupuncturists.

Interventions: No acupuncture (control group, $n=71$) and needle ($n=70$), laser ($n=71$), and sham laser ($n=70$) acupuncture. Treatments were delivered for 12 weeks. Participants and acupuncturists were blinded to laser and sham laser acupuncture. Control participants were unaware of the trial.

Main outcomes and measures: Primary outcomes were average knee pain (numeric rating scale, 0 [no pain] to 10 [worst pain possible]; minimal clinically important difference [MCID], 1.8 units) and physical function (Western Ontario and McMaster Universities Osteoarthritis Index, 0 [no difficulty] to 68 [extreme difficulty]; MCID, 6 units) at 12 weeks. Secondary outcomes included other pain and function measures, quality of life, global change, and 1-year follow-up. Analyses were by intention-to-treat using multiple imputation for missing outcome data.

Results: At 12 weeks and 1 year, 26 (9%) and 50 (18%) participants were lost to follow-up, respectively. Analyses showed neither needle nor laser acupuncture significantly improved pain (mean difference; -0.4 units; 95% CI, -1.2 to 0.4 , and -0.1 ; 95% CI, -0.9 to 0.7 , respectively) or function (-1.7 ; 95% CI, -6.1 to 2.6 , and 0.5 ; 95% CI, -3.4 to 4.4 , respectively) compared with sham at 12 weeks. Compared with control, needle and laser acupuncture resulted in modest improvements in pain (-1.1 ; 95% CI, -1.8 to -0.4 , and -0.8 ; 95% CI, -1.5 to -0.1 , respectively) at 12 weeks, but not at 1 year. Needle acupuncture resulted in modest improvement in function compared with control at 12 weeks (-3.9 ; 95% CI, -7.7 to -0.2) but was not significantly different from sham (-1.7 ; 95% CI, -6.1 to 2.6) and was not maintained at 1 year. There were no differences for most secondary outcomes and no serious adverse events.

Conclusions and relevance: In patients, older than 50 years with moderate or severe chronic knee pain, neither laser nor needle acupuncture conferred benefit over sham for pain or function. Our findings do not support acupuncture for these patients.

Keywords: Acupuncture, Chronic knee pain, Randomized clinical trial, Sham, Needle, Laser

(2) Evidence-Based Complementary and Alternative Medicine, Volume 2012, Article ID 697096, 5 pages. <http://dx.doi.org/10.1155/2012/697096>

Technical parameters for laser acupuncture to elicit peripheral and central effects: State-of-the-art and short guidelines based on results from the Medical University of Graz, the German Academy of Acupuncture, and the scientific literature

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Abstract

The scientific literature in the area of laser acupuncture is rather large; however, the actual mechanisms and effects have not yet been proven in detail. Since the early days of laser acupuncture, there are still many open questions concerning technical parameters of this innovative technique. In this paper, we report about the most important technical parameters (wavelength, output power, power density, energy density, dose range, and continuous or pulsed laser) for laser acupuncture and present quantitative results for optimal laser stimulation, which allow eliciting reproducible effects in the periphery and in the brain. There are several position statements on laser acupuncture and also several review articles in scientific literature concerning clinical effectiveness of laser acupuncture. For example, the Australian Medical Acupuncture College stated recently that "the optimal energy density for laser acupuncture and biostimulation, based on current clinical experience, is 4 J/cm²". However, our results of previous research studies and of this paper clearly show that dose must be adjusted according to the individual responses.

Keywords: Laser acupuncture, Technical parameters, Guidelines, Scientific literature

(3) Acupuncture in Medicine, Volume 31, 6 August 2013, 282–289. <http://dx.doi.org/10.1136/acupmed-2012-010297>

Differential brain effects of laser and needle acupuncture at LR8 using functional MRI

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Abstract

Objective: While needle acupuncture is a well-accepted technique, laser acupuncture is being increasingly used in clinical practice. The differential effects of the two techniques are of interest. We examine this in relation to brain effects of activation of LR8, a putative acupuncture point for depression, using functional MRI (fMRI).

Methods: Sixteen healthy participants were randomised to receive low intensity laser acupuncture to LR8 on one side and needle acupuncture to the contralateral LR8. Stimulation was in an on-off block design and brain patterns were recorded under fMRI.

Results: Significant activation occurred in the left precuneus during laser acupuncture compared with needle acupuncture and significant activation occurred in the left precentral gyrus during needle acupuncture compared with laser acupuncture.

Conclusions: Laser and needle acupuncture at LR8 in healthy participants produced different brain patterns. Laser acupuncture activated the precuneus relevant to mood in the posterior default mode network while needle acupuncture activated the parietal cortical region associated with the primary motor cortex. Further investigations are warranted to evaluate the clinical relevance of these effects.

Keywords: Laser and needle acupuncture, LR8, Brain, Precuneus, Precentral gyrus

(4) Journal of Pharmacopuncture, Vol. 18 No. 1, p7–18, March 2015

Loranthus ferrugineus: A mistletoe from traditional uses to laboratory bench

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Abstract

Objectives: *Loranthus ferrugineus* (*L. ferrugineus*) from Loranthaceae, a mistletoe, is a medicinal herb used for a variety of human ailments. Traditionally, decoctions of this parasitic shrub have been mainly used to treat high blood pressure (BP)

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