

“Efficacy of Auricular Acupressure for Chronic Low Back Pain”

Abstract:

In a systematic review of the efficacy of auricular acupressure on pain and disability in patients with chronic lower back pain (LBP). In this study, two researchers reviewed four English medical electronic databases and three Chinese databases. Seven trials met the criteria and were used in the review. The study showed that auricular acupressure had a significant effect on LBP within 12 weeks. After 4-weeks of follow-up and after the 4-week intervention there were promising effects. Although the disability level had no significant difference after the trial was completed. Overall there is encouraging evidence that auricular acupressure can provide relief for those with LBP.

Introduction:

Lower back pain (LBP) is one of the most prevalent health problems and is a burden that approximately 60-80% of the global population face. In about 20% of the world’s population, this back pain is chronic.¹ Lower back pain has been one of the main reasons for disability and was

¹ D. Hoy, C. Bain, G. Williams et al., “A systematic review of the global prevalence of low back pain,” *Arthritis and Rheumatism*, vol. 64, no. 6, pp. 2028–2037, 2012.

even labeled as the highest cause of years lived with a disability.²

Case Presentation:

Without a time limit researchers used 4 English databases and three Chinese databases to search for terms relating to auricular therapy, auricular point, auricular pressing therapy, etc.³ A snowball search was completed for reference lists of randomized controlled trials. Non-English eligible publications were translated to English and further analyzed. Researchers Li-Hua Yang and Si-Juan Mei reviewed the texts and references eligible for the study using the Cochrane Handbook.⁴ According to the handbook they divided and ranked the publications into three groups (A,B,C) based on the criteria met. Articles rated C that reflected a high risk of bias would be eliminated due to the risk of reducing the credibility of the results. The two reviewers independently went through the data and any disagreements were

² R. Buchbinder, F. M. Blyth, L. M. March, P. Brooks, A. D. Woolf, and D. G. Hoy, “Placing the global burden of low back pain in context,” *Best Practice and Research: Clinical Rheumatology*, vol. 27, no. 5, pp. 575–589, 2013.

³ Li-Hua Yang, Pei-Bei Duan, Qing-Mei Hou, Shi-Zheng Du, Jin-Fang Sun, Si-Juan Mei, Xiao-Qing Wang, “Efficacy of Auricular Acupressure for Chronic Low Back Pain: A Systematic Review and Meta-Analysis of Randomized Controlled Trials”, *Evidence-Based Complementary and Alternative Medicine*, vol. 2017, Article ID 6383649, 14 pages, 2017. <https://doi.org/10.1155/2017/6383649>

⁴ J. P. Higgins and S. Green, *Cochrane Handbook for Systematic Reviews of Interventions: Cochrane Book Series*, The Cochrane Collaboration, Oxford, UK, 2011.

resolved by consensus. A meta-analysis was completed using RevMan software. These data were categorized according to the length of acupressure therapy and follow-up: short term (up to 4-weeks), long-term (12 weeks), or follow-up (approx. 4 weeks after therapy).

Management and Outcome:

The researchers identified 85 potential “records”. Duplicates were removed, 26 articles were requested for full texts, and 25 eventually were evaluated. No articles were selected based on the snowball search. At the end of the review, only 7 articles met the inclusion criteria. Out of the 7 studies, 4 were A quality level and 3 were B quality level according to the Cochrane risk bias tool. In all studies, there were 15 main auricular acupoints used.⁵

(“Shenmen (7/7) and subcortex (6/7) were the ear points of high-frequent use, which were considered primarily for alleviating pain, followed by lumbosacral region (5/7), liver (4/7), kidney (4/7), sympathetic (3/7), low back (2/7), waist (2/7), popliteal fossa (1/7), groove of spinal posterior (1/7), sciatic nerve (1/7), urinary bladder (1/7), buttock (1/7), spleen (1/7), and *Ashi*

point (1/7), respectively.”)⁶ The point used were based on the World Federation of Acupuncture-Moxibustion Societies (WFAS), anatomical terminology, Chinese Auricular Acupressure, and nomenclature from Nogier. Nogier is a form of auricular acupressure performed on the ear.⁷ Six of these studies used taped objects with magnetic pellets during therapy. Many of the studies used performed the therapies either 3 times a day or for 3 minutes a day. These studies ranged from 2 weeks to 3 months.

Discussion:

The improvement found in the study relied on the guidelines that there was “disappearance or obvious relieving of backache and the related stiffness”.⁸ The result of the meta-analysis showed that compared to the control groups the

⁵ Li-Hua Yang, Pei-Bei Duan, Qing-Mei Hou, Shi-Zheng Du, Jin-Fang Sun, Si-Juan Mei, Xiao-Qing Wang, "Efficacy of Auricular Acupressure for Chronic Low Back Pain: A Systematic Review and Meta-Analysis of Randomized Controlled Trials", *Evidence-Based Complementary and Alternative Medicine*, vol. 2017, Article ID 6383649, 14 pages, 2017. <https://doi.org/10.1155/2017/6383649>

⁶ Li-Hua Yang, Pei-Bei Duan, Qing-Mei Hou, Shi-Zheng Du, Jin-Fang Sun, Si-Juan Mei, Xiao-Qing Wang, "Efficacy of Auricular Acupressure for Chronic Low Back Pain: A Systematic Review and Meta-Analysis of Randomized Controlled Trials", *Evidence-Based Complementary and Alternative Medicine*, vol. 2017, Article ID 6383649, 14 pages, 2017. <https://doi.org/10.1155/2017/6383649>

⁷ Gori, Luigi, and Fabio Firenzuoli. "Ear acupuncture in European traditional medicine." *Evidence-based complementary and alternative medicine : eCAM* vol. 4, Suppl 1 (2007): 13-6. doi:10.1093/ecam/nem106

⁸ Li-Hua Yang, Pei-Bei Duan, Qing-Mei Hou, Shi-Zheng Du, Jin-Fang Sun, Si-Juan Mei, Xiao-Qing Wang, "Efficacy of Auricular Acupressure for Chronic Low Back Pain: A Systematic Review and Meta-Analysis of Randomized Controlled Trials", *Evidence-Based Complementary and Alternative Medicine*, vol. 2017, Article ID 6383649, 14 pages, 2017. <https://doi.org/10.1155/2017/6383649>

therapy groups had a significant effect on managing their lower back pain. In some groups they had 5/30 patients felt an “obvious but tolerable pain of the ear after therapy”⁹. Other issues were due to uncomfortably with adhesive tape, soreness, or sleeping difficulty. These were all tolerable. No other adverse effects were reported. This study found that auricular acupressure therapy has favorable effects on patients' lower back pain. The evidence shows that it is a relatively safe pain management strategy and benefits people with chronic lower back pain.

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⁹ Li-Hua Yang, Pei-Bei Duan, Qing-Mei Hou, Shi-Zheng Du, Jin-Fang Sun, Si-Juan Mei, Xiao-Qing Wang, "Efficacy of Auricular Acupressure for Chronic Low Back Pain: A Systematic Review and Meta-Analysis of Randomized Controlled Trials", *Evidence-Based Complementary and Alternative Medicine*, vol. 2017, Article ID 6383649, 14 pages, 2017. <https://doi.org/10.1155/2017/6383649>