Table des matières

Lumbar Spinal Stenosis

Canal lombaire étroit : évaluation de l'acupuncture

1. Systematic Reviews and Meta-Analysis

☆☆☆	Evidence for effectiveness and a specific effect of acupuncture.
☆☆	Evidence for effectiveness of acupuncture.
☆	Evidence for effectiveness of acupuncture mais limitées qualitativement et/ou quantitativement.
Ø	No evidence or insufficient evidence.

1.1. Generic Acupuncture

1.1.1. Sun 2023

Sun YN, An Y, Zhou YJ, Wang XY, Yu CH. Non-pharmaceutical Chinese medical therapies for degenerative lumbar spinal stenosis: A systematic review and meta-analysis of randomized controlled trials. Complement Ther Med. 2023 Jun;74:102949. https://doi.org/10.1016/j.ctim.2023.102949

Objective	The objective of the study was to assess the effectiveness of utilizing Non-Pharmaceutical Chinese Medical (NPCM) therapy singularly or in combination for the treatment of Degenerative Lumbar Spinal Stenosis (DLSS).
Methods	The comprehensive search for all randomized controlled trials regarding NPCM therapies for the treatment of DLSS was performed through online databases searches, commencing from their inception to January 1st, 2023. The relevant literature underwent a thorough screening process, and the data was meticulously extracted and subjected to analysis through the implementation of RevMan 5.3 software. The Cochrane Risk of Bias tool was employed to assess the potential risk of bias. The synthesis of evidence was performed Grading of Recommendations Assessment, Development, and Evaluation.
Results	The extensive search procedure produced 5674 records, including data from **37 studies** of 38 comparisons (2965 participants). Moderate evidence was obtained demonstrating that the application of acupuncture for a duration of 6-8 weeks was significantly superior to sham acupuncture in terms of intermediate-term (6 months) alleviation of back pain (2 trials, n = 128; MD, -1.08; 95% CI, -1.81~-0.34) and improvement in lumbar function (2 trials, n = 128; MD, -1.40; 95% CI, -2.93~-0.13). The available low evidence suggested that, as compared to sham acupuncture, acupuncture was effective in reducing short-term (3 months) back pain and enhancing lumbar function but had no impact on leg pain. A trial with low risk of bias found that acupuncture was more effective than sham acupuncture in enhancing disability and walking capabilities. The other studies presented inconsistent evidence with regards to the efficacy of the various interventions employed.

Conclusions	Evidence of low-to-moderate quality suggests that for DLSS patients, the implementation of acupuncture in comparison to sham acupuncture presents favorable outcomes in terms of short- and intermediate-term alleviation of back pain, improvement in lumbar function, enhancement of disability and walking capacity. The conclusion regarding the efficacy of other NPCM therapies was not obtained due to the insufficient quality of the available evidence.

1.1.2. Tang H 2014 ★

Tang Hanwu, Sun Li, Lin Yifeng. [Special acupuncture therapy in lumbar spinal stenosis: a meta-analysis]. Chinese Journal of Traditional Medical Traumatology & Orthopedics. 2014;12:13-16. [186962].

Objective	To evaluate the effect of special acupuncture therapy in lumbar spinal stenosis.
Methods	Data sources were came from retrieving CNKI, VIP and Wangfang data between 2009 and 2013. Two independent investigators reviewed studies including randomized and semi-randomized control trials according to Cochrane Handbook. Using RevMan 5. 0, we calculated the relative risk (RR)and 95%confidence interval (CI).
Results	**Seven studies involved 799 patients** were identified. The recovery rate of special acupuncture therapy in lumbar spinal stenosis was higher than that of conservative therapy (RR = 1. 86, 95% CI [1. 44, 2. 39], P< 0. 00001)or routine acupuncture therapy (RR = 1. 75, 95% CI [1. 32, 2. 32], P= 0. 0001)The total effective rate of special acupuncture therapy was also higher than the other groups (RR = 1. 08, 95% CI [1. 04, 1. 13], P= 0. 0002;RR = 1. 07, 95% CI [1. 02, 1. 12], P= 0. 007).
Conclusion	**Special acupuncture therapy in lumbar spinal stenosis is better than the other therapies.**

1.1.3. Kim KH 2013 Ø

Kim KH, Kim TH, Lee BR, Kim JK, Son DW, Lee SW, Yanga GY. Acupuncture for lumbar spinal stenosis:A systematic review and meta-analysis. Complementary Therapies in Medicine (2013) 21, 535-556. [172670]

Purpose	Lumbar spinal stenosis (LSS) negatively affects patients' quality of life. No systematic review evaluating the effects and safety of acupuncture for this population is available. We aimed to evaluate evidence indicating the effectiveness and safety of acupuncture for LSS.
Methods	We searched five English-language databases (EMBASE, MEDLINE, CENTRAL, CINAHL, and AMED) and one Chinese database (CAJ) for randomised controlled trials (RCTs) and nonrandomised controlled clinical trials (CCTs) of needle acupuncture for LSS. CCTs were analyzed only in terms of safety and intervention-related information.
Results	**Six RCTs (n = 582)** and six CCTs, which were all from China and reported in Chinese, were included. High or uncertain risk of bias and clinical heterogeneity due to different acupuncture techniques were observed. All RCTs compared different combinations or techniques of acupuncture. None of the included studies mentioned safety issues. Acupuncture combined with other interventions and/or with additional stimulation increased the number of improved patients compared with acupuncture alone or relatively simpler stimulation (n = 582; relative risk, 1.16; 95% confidence interval 1.08-1.25). Pain intensity, overall symptoms, and functional outcomes related to LSS and quality of life showed significantly favourable improvement in the treatment group compared with the control group, which lasted for up to 6 months post-treatment.

Conclusion	**We found no conclusive evidence of the effectiveness and safety of acupuncture for LSS because of high or uncertain risk of bias and the limited generalisability of the included studies**. Future trials using rigorous methodology, appropriate comparisons and clinically relevant outcomes should be conducted.

1.2. Special Acupuncture Techniques

1.2.1. Acupotomy

1.2.1.1. Kwon 2019

Kwon CY, Yoon SH, Lee B, Leem J. Acupotomy for the treatment of lumbar spinal stenosis: A systematic review and meta-analysis. Medicine (Baltimore). 2019;98(32). [200288].

Background	Lumbar spinal stenosis (LSS) is caused by neural compression due to narrowing of the lumbar spinal canal or neural foramen. Surgical intervention is a standard treatment for LSS; however, the steep increase in the surgical rate, post-operative complications, and comparatively low long-term satisfaction are considered to be limitations of this surgical approach. Conversely, acupotomy is a minimally invasive technique that combines the effects of conventional acupuncture with micro-incision, which may offer an alternative to surgery for the treatment of LSS. This review was conducted to investigate and critically review the current evidence on the efficacy and safety of acupotomy for LSS.
Methods	Eleven databases were searched from their respective inception dates to December 28, 2018. Randomized controlled trials (RCTs) comparing acupotomy and wait-list, sham treatment, or active controls were included. The quality of the included studies was assessed using risk-of-bias tool.
Results	Seven RCTs were included in this review and meta-analysis. The methodological quality of the included studies was generally poor. The acupotomy treatment group was associated with significantly lower visual analogue scale scores (range 0~10) (5 RCTs; mean difference [MD] -1.55, 95% confidence interval [Cis] -2.60 to -0.50; I = 94%) and higher Japanese Orthopedic Association Score (3 RCTs; MD 4.70, 95% CI 3.73 to 5.68; I = 0%) compared to the active control group. In subgroup analysis based on the type of active controls, acupotomy retained significant benefits over lumbar traction and acupuncture, as well as over lumbar traction, spinal decompression, and acupuncture. Safety data were reported in only 1 study, and no adverse events occurred in either the acupotomy or the acupuncture control group.
Conclusion	According to current evidence, acupotomy might be beneficial for treating LSS. Acupotomy showed consistent superiority over lumbar traction, but the results were mixed in comparisons with other interventions, such as spinal decompression and acupuncture. However, the findings should be interpreted cautiously, given the poor methodological quality of the included studies, and potential small-study effects. Further larger, high-quality, rigorous RCTs should be conducted on this topic and rigorous reporting of acupotomy procedures and safety data should be encouraged.

2. Clinical Practice Guidelines

⊕ positive recommendation (regardless of the level of evidence reported) Ø negative recommendation (or lack of evidence)

2.1. Canadian Chiropractic Guideline Initiative / Bone and Joint Canada (Canada) 2021 ⊕

Bussières A, Cancelliere C, Ammendolia C, Comer CM, Zoubi FA, Châtillon CE, Chernish G, Cox JM, Gliedt JA, Haskett D, Jensen RK, Marchand AA, Tomkins-Lane C, O'Shaughnessy J, Passmore S, Schneider MJ, Shipka P, Stewart G, Stuber K, Yee A, Ornelas J. Canadian Chiropractic Guideline Initiative in collaboration and Bone and Joint Canada. Non-Surgical Interventions for Lumbar Spinal Stenosis Leading To Neurogenic Claudication: A Clinical practice guideline. J Pain. 2021:S1526-5900(21)00188-7. [208728]. doi

PICO 2. For patients with lumbar spinal stenosis, should acupuncture versus another treatment be used to decrease pain, and improve function, quality of life, and return to function. Acupuncture For patients with LSS and neurogenic claudication with or without LBP, we suggest considering traditional acupuncture on a trial basis to improve pain and physical function in the short-term. Strength of recommendation: Conditional/Weak. Quality of evidence: Very low (⊕OOO).

2.2. North American Spine Society (NASS, USA) 2013 Ø

Kreiner DS, Shaffer WO, Baisden JL, Gilbert TJ, Summers JT, Toton JF, Hwang SW, Mendel RC, Reitman CA; North American Spine Society. An evidence-based clinical guideline for the diagnosis and treatment of degenerative lumbar spinal stenosis (update). Spine J. 2013;13(7):734-43. [219408]. doi

There is insufficient evidence to make a recommendation for or against acupuncture in for the treatment of patients with lumbar spinal stenosis . Grade of Recommendation: I (insufficient evidence)

2.3. North American Spine Society (NASS) 2011 Ø

North American Spine Society (NASS). Lumbar spinal stenosis. Burr Ridge (IL): North American Spine Society (NASS). 2011; :104P. [165979].

There is insufficient evidence to make a recommendation for or against acupuncture in for the treatment of patients with lumbar spinal stenosis.