INPLASY

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Effects of Acupuncture on Pain and Disability after Lumbar Spine Surgery: A Systematic Review and Meta-Analysis of randomized controlled trials

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ADMINISTRATIVE INFORMATION

Support - No funding sources or sponsors.

Review Stage at time of this submission - Completed but not published.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202490060

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 16 September 2024 and was last updated on 16 September 2024.

INTRODUCTION

Review question / Objective The current study investigated the effects of acupuncture on postoperative pain and disability in patients receiving lumbar spine surgery by conducting a systematic review and meta-analysis.Pain and disability frequently accompany recovery from lumbar spine surgery.
I:acupuncture
C:comparison group
O:pain, disability
S:randomized controlled trial.

Condition being studied Although numerous studies have revealed that acupuncture interventions can reduce pain in postoperative patients, a comprehensive review of evidence regarding the effectiveness of acupuncture interventions on such patients is required.

METHODS

Participant or population P:lumbar surgery / lumbar operation / vertebra surgery / spinal surgery / spine surgery / back surgery.

Intervention I:acupuncture.

Comparator C:comparison group.

Study designs to be included Randomized controlled trial.

Eligibility criteria Acupuncture-related articles in Chinese and English were selected based on the study inclusion (lumbar surgery, acupuncture)and exclusion criteria(non-RCTs, non-Chinese or English papers).

Information sources Electronic literature search of 12 databases: MEDLINE, PubMed, Cochrane

Library, EBSCO ASC, CINAHL PLUS with Full Text, Embase, Web of Science, PsycINFO, Wangfang Data, National Digital Library of Theses and Dissertations in Taiwan, China National Knowledge Infrastructure, and Airiti Library.

Main outcome(s) Pain:Visual Analogue Scale, VAS Disability: Japanese Orthopedic Association Scores, JOAS; Oswestry Disability Index, ODI**.**

Quality assessment / Risk of bias analysis Modified Jadad Scale(MJS); Cochranerisk of bias tool, RoB 2.0.

Strategy of data synthesis Software: Comprehensive Meta-Analysis Version 3.0(CMA 3.0) statistical analysis by standardized mean difference(SMD) from mean and standard deviation in every artiles.

Subgroup analysis A=acupuncture; EA=electro-acupuncture.

Sensitivity analysis One paper removal.

Language restriction In Chinese and English.

Country(ies) involved Taiwan (Fooyin University, Kaohsiung.Taipei Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, New Taipei City, &School of Post-baccalaureate Chinese Medicine, Tzu Chi University.Yuanpei University of Medical Technology, Hsinchu. and Kaohsiung.

Keywords acupuncture, post-lumbar spine surgery, pain, disability.

Contributions of each author
Author 1 - Tsai-Wen Chung - The author read, provided feedback and the strategies of literature searching, bias assessment.
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Author 3 - Hui-Ching Chien - The author contributed to the development of the selection criteria, and the risk of bias assessment strategy.
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