

INPLASY202490016

doi: 10.37766/inplasy2024.9.0016

Received: 4 September 2024

Published: 4 September 2024

Corresponding author:

lai xiaomin

2023121459@stu.cqmu.edu.cn

Author Affiliation:

Chongqing Medical University.

Lai, XM; Yang, L; Cheng, HX; Ke, WH.

ADMINISTRATIVE INFORMATION

Support - No.

Review Stage at time of this submission - The review has not yet started.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202490016

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 4 September 2024 and was last updated on 15 October 2024.

INTRODUCTION

Review question / Objective What is the effectiveness of Kinesio taping combined with conventional physical therapy compared to conventional physical therapy alone in reducing pain and improving function in knee osteoarthritis patients?

Condition being studied Knee osteoarthritis (OA) is a common degenerative joint disease characterized by pain, stiffness, and reduced function. Conventional physical therapy (PT), including exercises, manual therapy, and other modalities, is often used to manage symptoms and improve function in knee OA patients.

Kinesio taping (KT) is an adjunctive treatment that has gained popularity in recent years. Despite the increasing use of KT combined with conventional PT, there remains uncertainty about the additive effects of KT on pain relief and functional improvement in knee OA patients.

METHODS

Search strategy Electronic database: PubMed, Cochrane Library, Embase, Web of Science, 中国知网 (CNKI), 万方数数据库, 和维普数据库 (VIP Database). Terms: "Kinesio taping", "Athletic tape", "knee osteoarthritis", etc.

Participant or population Adults diagnosed with knee osteoarthritis.

Intervention Kinesio taping combined with conventional physical therapy (physical therapy includes exercise, hot compress, massage, and other conventional systematic treatment methods, excluding acupuncture).

Comparator The control group involves solo physical therapy (studies are included only if the physical therapy protocol is the same for both groups), excluding physical therapy combined with medication or Sham Kinesio tape.

Study designs to be included Randomized controlled trials.

Eligibility criteria The study population consists of patients with knee osteoarthritis (KOA); Kinesio taping combined with conventional physical therapy (physical therapy includes exercise, hot compress, massage, and other conventional systematic treatment methods, excluding acupuncture);

The control group involves solo physical therapy (studies are included only if the physical therapy protocol is the same for both groups), excluding physical therapy combined with medication or Sham Kinesio tape.

The literature reports one or more of the following outcomes: pain scores (Visual Analogue Scale or Numerical Pain Rating Scale), WOMAC (Pain, Stiffness, Function, Total) scores, Knee ROM (Range of Motion), TUG (Timed Up and Go Test); The study type is a randomized controlled trial (RCT).

Information sources Database and related reviews, meta-analyses, and references of included literature.

Main outcome(s) PKnee ROM (Range of Motion), TUG (Timed Up and Go Test).

Additional outcome(s) Quality of life (e.g., SF-36, EQ-5D). Knee range of motion. Adverse events related to the interventions.

Quality assessment / Risk of bias analysis The Cochrane Risk of Bias Tool will be used to assess the quality of included studies. Domains assessed will include sequence generation, allocation concealment, blinding, incomplete outcome data, selective reporting, and other biases. Each domain will be rated as "low risk," "high risk," or "unclear risk."

Strategy of data synthesis Meta-analyses will be performed if data are sufficiently homogeneous in terms of participants, interventions, and outcomes. The random-effects model will be used to account for variability across studies. Continuous outcomes will be analyzed using mean differences (MD) or standardized mean differences (SMD) with 95% confidence intervals (CI), while dichotomous outcomes will be analyzed using risk ratios (RR) with 95% CI.

Subgroup analysis Subgroup analyses will be conducted based on factors such as the severity of knee osteoarthritis, type of physical therapy

used, duration and frequency of Kinesio taping, and study quality.

Sensitivity analysis Sensitivity analyses will be performed to assess the robustness of the results by excluding studies at high risk of bias.

Language restriction None.

Country(ies) involved China.

Keywords Kinesio tape, knee osteoarthritis, Randomized controlled trials.

Contributions of each author

Author 1 - lai xiaomin.

Email: 2023121459@stu.cqmu.edu.cn

Author 2 - yang liang.

Email: dryangliang@163.com

Author 3 - cheng hongxin.

Email: drchenghx@163.com

Author 4 - ke weihao.

Email: 804791727@qq.com