INPLASY

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Kinesio Taping Combined with Conventional Physical Therapy for Knee Osteoarthritis: A Systematic Review and Meta-Analysis

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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 4 September 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:Electronic database:PubMed, Cochrane Library, Embase, Web of Science, Scopus, CINAHL, PEDro, CNKI, Wanfang database, VIP Database。:PubMed, Cochrane Library, Embase, Web of Science, Scopus, CINAHL, PEDro, 中国知网 (CNKI), 万方数据, 和维普数据库 (VIP Database).
Terms:"Kinesio taping," "physical therapy," "knee osteoarthritis," and "randomized controlled trials."

Participant or population Adults diagnosed with knee osteoarthritis.

Intervention Kinesio taping combined with any form of conventional physical therapy.

Comparator Conventional physical therapy alone.

Study designs to be included Randomized controlled trials.

Eligibility criteria Inclusion Criteria: This review includes randomized controlled trials involving adults with knee osteoarthritis, comparing Kinesio taping combined with conventional physical therapy to conventional therapy alone or other non-pharmacological interventions. Studies must report outcomes such as pain, function, quality of life, or knee range of motion and be published in English or Chinese.

Exclusion Criteria: Studies will be excluded if they are non-randomized, not focused on knee osteoarthritis, do not include Kinesio taping or conventional therapy, lack specified outcomes, or are duplicate publications. Additionally, non-English or non-Chinese studies without translation, and those without sufficient data will be excluded.

Information sources Electronic database: PubMed, Cochrane Library, Embase, Web of Science, Scopus, CINAHL, PEDro, CNKI, Wanfang database, VIP Database.

Main outcome(s) Visual Analog Scale [VAS]、Western Ontario and McMaster Universities Osteoarthritis Index [WOMAC]、knee injury and Osteoarthritis Outcome Score [KOOS].

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 Chinese or English.

Country(ies) involved China.

Keywords Kinesio tape, knee osteoarthritis, Randomized controlled trials.

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