

INPLASY PROTOCOL

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Review Stage at time of this submission: Formal screening of search results against eligibility criteria.

Conflicts of interest:

None declared.

Efficacy of anti gravity treadmill in knee joint rehabilitation. A Systematic Review and Meta-analysis

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Review question / Objective: The purpose of this study is to investigate the efficacy of anti gravity treadmills in the rehabilitation of knee joint diseases, the article type included is RCT.

Information sources: PubMed, EMBASE, Cochrane Library, Web of Science, Google Scholar, China National Knowledge Infrastructure, Chinese Biomedical Literature Database, WanFang database.

Main outcome(s): knee Range of motion, International Knee Documentation Committee score, difference in the circumference, gait, Muscle Strength.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 21 April 2022 and was last updated on 21 April 2022 (registration number INPLASY202240131).

INTRODUCTION

Review question / Objective: The purpose of this study is to investigate the efficacy of anti gravity treadmills in the rehabilitation of knee joint diseases, the article type included is RCT.

Condition being studied: We are a professional sports medicine team, we focus on the surgical treatment and rehabilitation of sports injuries.

METHODS

Participant or population: Patients with knee joint diseases.

Intervention: Anti gravity treadmill.

Comparator: Normal treatment.

Study designs to be included: Randomized controlled trial.

Eligibility criteria: Knee disease, such as knee osteoarthritis, tibial plateau fracture, anterior cruciate ligament injury.

Information sources: PubMed, EMBASE, Cochrane Library, Web of Science, Google Scholar, China National Knowledge Infrastructure, Chinese Biomedical Literature Database, WanFang database.

Main outcome(s): Knee Range of motion, International Knee Documentation Committee score, difference in the circumference, gait, Muscle Strength.

Quality assessment / Risk of bias analysis: Cochrane Collaboration's tool.

Strategy of data synthesis: Data analysis using Revman, Fixed-effect models were selected for analyses when the heterogeneity was not statistically significant ($I^2 < 50\%$), and random-effect models were selected for analyses when the heterogeneity was statistically significant ($I^2 \geq 50\%$).

Subgroup analysis: Subgroup analysis using Revman.

Sensitivity analysis: Sensitivity analysis using Revman, analysis sensitivity by removing changes in the effect size of one of the articles.

Country(ies) involved: China.

Keywords: anti gravity, knee joint.

Contributions of each author:

Author 1 - liu zhuang.

Author 2 - zhou jingbin.