

INPLASY PROTOCOL

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Conflicts of interest:

None declared.

The effects of resistance exercise on body composition and physical function in prostate cancer patients undergoing androgen deprivation therapy: An update systematic review and meta-analysis

Tian, SY¹.

Review question / Objective: (P) : Interventions for prostate cancer patients (I):resistance exercise (C):usual care (O):Improvements in body composition and function (S):RCT trial.

Condition being studied: After male hormone deprivation therapy, the body composition and physical function of prostate cancer patients will change, and there will be many adverse reactions, such as lean body mass loss and body fat percentage increase.Men with prostate cancer who take androgen deprivation therapy have many adverse effects.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 05 August 2022 and was last updated on 05 August 2022 (registration number INPLASY202280019).

INTRODUCTION

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cancer who take androgen deprivation therapy have many adverse effects.

METHODS

Participant or population: Prostate cancer patients (181).

Intervention: Resistance exercise.

Comparator: Usual care.

Study designs to be included: RCT.

Eligibility criteria: None.

Information sources: Pubmed, Embase, Cochrane and web of science.

Main outcome(s): Lean body mass, Body fat mass, Body fat rate, Appendicular skeletal mass, 400m walk, Times up and go, Stair climb, Leg press.

Quality assessment / Risk of bias analysis: The cochrane tools.

Strategy of data synthesis: The statistical analyses were performed using RevMan software (version 5.3) and Stata software (version 12.0). Absolute net differences between the intervention and control groups were used to estimate merger effects. Outcomes were expressed as the weighted mean difference (MD) and its 95% CI. Random effect models were used given the heterogeneity of interventions. Due to the small number of literatures included, we did not conduct subgroup analysis.

Subgroup analysis: According to the duration of resistance exercise is divided into <6 months and ≥6 months. According to resistance exercise intensity is divided into 6-10rm, 8-12rm, 8-15rm. According to start time of resistance exercise after ADT is divided into start exercise immediately after ADT and delayed exercise after ADT.

Sensitivity analysis: Sensitivity analysis was carried out in STATA software to reflect the sensitivity of the article by the change of effect size after deleting one of the articles.

Country(ies) involved: China.

Keywords: resistance exercise prostate cancer androgen deprivation therapy.

Contributions of each author:
Author 1 - Siyu Tian.