INPLASY PROTOCOL

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None declared.

Effectiveness of Exercise Therapy on the Prevention and Treatment of Chemotherapy-induced Peripheral Neuropathy in Cancer patients: a Systematic Review and Meta Analysis

Zhang, Y[1], Li, ZH[2]; Liu, ZH[3].

Review question / Objective: **P(Tumor patients); I(exercise therapy); C(chemotherapy-induced peripheral neuropathy); O(What effect will it have).**
Condition being studied: **Chemotherapy-induced Peripheral Neuropathy Cancer.**
Eligibility criteria: **Inclusive criteria: (1) Study type: randomized controlled study (RCT); (2) Subjects: Patients with pathological diagnosis of tumor and receiving chemotherapy, regardless of nationality, race and cancer stage; (3) Intervention measures: exercise therapy was used in the intervention group; (4) Control measures: the control group was given routine nursing care.Exclusion criteria (1) The intervention measures were comprehensive; (2) The measurement standard of this study was not evaluated; (3) Grey literature and data missing cannot be analyzed; (4) Repetitive reports; (5) Non Chinese and English literature.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 14 October 2022 and was last updated on 14 October 2022 (registration number INPLASY2022100055).

INTRODUCTION

Review question / Objective: **P(Tumor patients); I(exercise therapy); C(chemotherapy-induced peripheral neuropathy); O(What effect will it have).**

Rationale: **To evaluate the intervention effect of exercise therapy on peripheral neuropathy caused by chemotherapy in tumor patients, providing evidence to nursing clinical practices.**

Condition being studied: **Chemotherapy-induced Peripheral Neuropathy Cancer.**

METHODS

Search strategy: CNKI, Wanfang Data, VIP, CBM, PubMed, Embase, CINAHL, Cochrane Library and Web of Science.

Participant or population: Tumor patients.

Intervention: I want to evaluate the effect of exercise therapy on peripheral neuropathy caused by chemotherapy in tumor patients.

Comparator: Exercise therapy can reduce neurotoxicity, reduce limb neuropathic pain, and promote body balance in patients undergoing tumorchemotherapy.

Study designs to be included: Randomized controlled study (RCT).

Eligibility criteria: Inclusive criteria: (1) Study type: randomized controlled study (RCT); (2) Subjects: Patients with pathological diagnosis of tumor and receiving chemotherapy, regardless of nationality, race and cancer stage; (3) Intervention measures: exercise therapy was used in the intervention group; (4) Control measures: the control group was given routine nursing care.Exclusion criteria (1) The intervention measures were comprehensive; (2) The measurement standard of this study was not evaluated; (3) Grey literature and data missing cannot be analyzed; (4) Repetitive reports; (5) Non Chinese and English literature.

Information sources: Databases：CNKI, Wanfang Data, VIP, CBM, PubMed, Embase, CINAHL, Cochrane Library and Web of Science contact with author：18202257079.

Main outcome(s): effect measures：Various motion methods. Timing：Exercise therapy is taken during chemotherapy, and the effect is repeatedly measured one week or several weeks after chemotherapy.

Additional outcome(s): Exercise therapy can reduce neurotoxicity, reduce limb neuropathic pain, and promote body balance in patients undergoing tumor chemotherapy.

Data management: Using endnote software to check duplicate documents. Data shall be independently extracted from each literature included and input into Excel.

Quality assessment / Risk of bias analysis: Use Cochrane Handbook for Systematic Reviews of InterventionsA to evaluate the literature. Evaluated by Egger test whether there is publication bias.

Strategy of data synthesis: Use RevMan5.3 software for data analysis.

Subgroup analysis: Meta analysis results showed that there was little heterogeneity among the studies, and no subgroup analysis was conducted.

Sensitivity analysis: Meta analysis was conducted after removing the literatures with large heterogeneity.

Language restriction: Non Chinese and English documents are not included.

Country(ies) involved: China (Tian Jin Medical University Of Cancer Institute & Hospital).

Other relevant information: No.

Keywords: Exercise therapy; neoplasms; chemotherapy-induced peripheral neuropathy; intervention effect; systematic review.

Contributions of each author:
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