

INPLASY PROTOCOL

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Review Stage at time of this submission:

Preliminary searches.

Conflicts of interest:

None declared.

Effects of Exercise on Cardiovascular Epidemics

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Review question / Objective: ① **Population:** 1) Hypertension. Including primary hypertension, hypertension with previous medical history (excluding clinically cured), SBP>130mmhg, DBP>80mmhg;; 2) Stroke. Including stroke and cerebral infarction, confirmed by clinical medicine; 3) Coronary heart disease. Conform to the diagnostic criteria of coronary heart disease, including MI or PCI, CABG, angina, etc; 4) Heart failure. It meets the diagnostic criteria for heart failure, including chronic and acute. ② **Intervention:** 1) Aerobic exercise; 2) Intermittent movement); 3) Aerobic exercise combined with resistance exercise (high-intensity intermittent aerobic exercise. ③ **Comparison:** The control group did not take any intervention measures, but allowed routine drugs and nursing. ④ **Outcomes:** SBP、DBP、HRV、HRR、VO₂max、LVEF、LVED、Q-T、LVEDD、LVESD、MAP. ⑤ **Study type:** Randomized controlled trial.
Condition being studied: Effects of different exercise patterns on patients with coronary heart disease, stroke, hypertension and heart failure

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 05 December 2022 and was last updated on 05 December 2022 (registration number INPLASY2022120024).

INTRODUCTION

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② Intervention: 1) Aerobic exercise; 2) Intermittent movement); 3) Aerobic exercise combined with resistance exercise (high-intensity intermittent aerobic exercise. ③ Comparison: The control group did not take any intervention measures, but allowed routine drugs and nursing. ④ Outcomes: SBP、DBP、HRV、HRR、VO₂max、LVEF、LVED、Q-T、LVEDD、LVESD、MAP. ⑤ Study type: Randomized controlled trial.

Condition being studied: Effects of different exercise patterns on patients with coronary heart disease, stroke, hypertension and heart failure.

METHODS

Participant or population: Hypertension, Stroke, Coronary heart disease, Heart failure.

Intervention: Aerobic exercise, Resistance movement, Aerobic bonding resistance.

Comparator: There was no significant difference in baseline data between groups, and the control group did not intervene or allow routine drugs and nursing.

Study designs to be included: RCT.

Eligibility criteria: Exclusion criteria ① Study type: non randomized controlled trial ② Subjects: All patients did not meet the diagnostic criteria ③ Intervention measures: multiple interventions are combined, but the same basic interventions between groups are not included ④ Outcome indicators: no relevant indicators, lack of data, suspicious data, data cannot be converted, duplicate data ⑤ Study design: animal experiment; Subjects' dyskinesia; There are significant differences in basic data; There was no clear distinction between the experimental group and the control group; Randomized grouping has the subjective intervention of the subject or researcher, that is, there is doubt at random; There were differences in

basic intervention between the control group and the experimental group; ⑥ Other factors: lack of data, contact with the author, no reply; Conflicts of interests between authors.

Information sources: Pubmed, Embase, The Cochrane Library, SinoMed, WOS.

Main outcome(s): SMD.

Quality assessment / Risk of bias analysis: Egger.

Strategy of data synthesis: Not reported.

Subgroup analysis: According to the influence of different exercise modes on different diseased groups, they are divided into two subgroups.

Sensitivity analysis: Funnel chart.

Country(ies) involved: China.

Keywords: Cardiovascular disease; epidemiology; Exercise.

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