

INPLASY

INPLASY2023120027

doi: 10.37766/inplasy2023.12.0027

Received: 06 December 2023

Published: 06 December 2023

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Investigating the efficacy of pretreatment with traditional Chinese medicine in patients undergoing percutaneous coronary intervention: A meta-analysis of randomized controlled trials

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ADMINISTRATIVE INFORMATION

Support - None.

Review Stage at time of this submission - Preliminary searches.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY2023120027

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 06 December 2023 and was last updated on 06 December 2023.

INTRODUCTION

Review question / Objective To evaluate the clinical effect of traditional Chinese medicine (TCM) on periprocedural myocardial injury (PMI) and cardiovascular events in patients with coronary artery disease (CAD) undergoing percutaneous coronary intervention (PCI).

Condition being studied PubMed, Chinese National Knowledge Infrastructure (CNKI), Cochrane library, Chinese Biomedical Literature Database (CBM), Ovid, Embase, Web of Science and Wanfang databases, research worker, equipment, etc.

METHODS

Participant or population Patients with coronary artery disease (CAD).

Intervention traditional Chinese medicine (TCM) on periprocedural myocardial injury (PMI) and

cardiovascular events in patients with coronary artery disease (CAD) undergoing percutaneous coronary intervention (PCI).

Comparator Patients who undergoing percutaneous coronary intervention were not treated with traditional Chinese medicine.

Study designs to be included RCT.

Eligibility criteria Diagnostic criteria for enrolled patients.

Information sources PubMed, Chinese National Knowledge Infrastructure (CNKI), Cochrane library, Chinese Biomedical Literature Database (CBM), Ovid, Embase, Web of Science and Wanfang databases.

Main outcome(s) Periprocedural myocardial injury (PMI) and cardiovascular events in patients.

Quality assessment / Risk of bias analysis Cochrane.

Strategy of data synthesis The qualities of the included RCTs were assessed using the Cochrane Risk of Bias criteria by two independent authors. The studies were categorized as high risk, low risk, or unclear risk according to selection bias, performance bias, detection bias, attrition bias, reporting bias and other biases.

Subgroup analysis Effects of TCMs pretreatment on the incidence of PMI after PCI, Effects of TCMs pretreatment on changes of serum CK-MB level after PCI, Effects of TCMs pretreatment on changes of serum cardiac troponin level after PCI, Effects of TCMs pretreatment on the incidence of MACEs after PCI.

Sensitivity analysis Since data from serum CK-MB and cardiac troponin levels after PCI have significant statistical heterogeneity. Sensitivity analysis was applied to assess the stability of the results using sequential omission of each individual study.

Country(ies) involved China.

Keywords traditional Chinese medicine, percutaneous coronary intervention, periprocedural myocardial injury, cardiovascular events.

Contributions of each author

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