

INPLASY PROTOCOL

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None declared.

Systematic Evaluation and Meta-analysis of Banxia Baizhu Tianma Decoction and Zexie Decoction Combined with Conventional Western Medicine in the Treatment of Hypertension

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Review question / Objective: To systematically evaluate the efficacy of Banxia Baizhu Tianma Decoction and Zexie Decoction combined with conventional western medicine in the treatment of hypertension, and to provide a basis for the decision-making of clinical medication for hypertension.

Participants: Patients with hypertension of all syndroms who met the diagnostic criteria for hypertension were included. The age, gender, time of onset, and source of cases are not limited. **Interventions:** The treatment group was treated with Banxia Baizhu Tianma Decoction and Zexie Decoction combined with conventional western medicine for hypertension. **Comparisons:** The control group was treated with conventional western medicine alone. **Outcomes:** Total clinical efficacy, systolic blood pressure (SBP), diastolic blood pressure (DBP).

Information sources: Computer and manual search of 7 Chinese and English databases, the search scopes are: CNKI, Wanfang, VIP, CBM, Web of Science, PubMed, Cochrane Library. Clinical randomized controlled trials (RCTs) of Banxia Baizhu Tianma Decoction and Zexie Decoction combined with conventional western medicine for the treatment of hypertension.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 18 August 2021 and was last updated on 18 August 2021 (registration number INPLASY202180068).

INTRODUCTION

Review question / Objective: To systematically evaluate the efficacy of Banxia Baizhu Tianma Decoction and Zexie

Decoction combined with conventional western medicine in the treatment of hypertension, and to provide a basis for the decision-making of clinical medication for

hypertension. **Participants:** Patients with hypertension of all syndroms who met the diagnostic criteria for hypertension were included. The age, gender, time of onset, and source of cases are not limited. **Interventions:** The treatment group was treated with Banxia Baizhu Tianma Decoction and Zexie Decoction combined with conventional western medicine for hypertension. **Comparisons:** The control group was treated with conventional western medicine alone. **Outcomes:** Total clinical efficacy, systolic blood pressure (SBP), diastolic blood pressure (DBP).

Condition being studied: Computer and manual retrieval, including CNKI, Wanfang, VIP, CBM, Web of Science, PubMed, Cochrane Library. The retrieval content was randomized controlled trials (RCTs) of Banxia Baizhu Tianma Decoction and Zexie Decoction combined with conventional western medicine for the treatment of hypertension from the establishment of the database to December 04, 2020. The included literature was managed and screened by EndNote software; the quality of the included literature was scored according to the Jadad scale; the risk bias of the included literature was assessed by the Cochrane tool; the results of the meta-analysis were described by the RevMan5.3 software; the sources of heterogeneity between the studies were performed by the Stata16.0 software.

METHODS

Participant or population: Patients with hypertension of all syndroms who met the diagnostic criteria for hypertension were included. The age, gender, time of onset, and source of cases are not limited.

Intervention: The treatment group was treated with Banxia Baizhu Tianma Decoction and Zexie Decoction combined with conventional western medicine for hypertension.

Comparator: The control group was treated with conventional western medicine alone.

Study designs to be included: Clinical randomized controlled trials (RCTs) of Banxia Baizhu Tianma Decoction and Zexie Decoction combined with conventional western medicine for the treatment of hypertension.

Eligibility criteria: Clinical randomized controlled trials (RCTs) of Banxia Baizhu Tianma Decoction and Zexie Decoction combined with conventional western medicine for the treatment of hypertension.

Information sources: Computer and manual search of 7 Chinese and English databases, the search scopes are: CNKI, Wanfang, VIP, CBM, Web of Science, PubMed, Cochrane Library. Clinical randomized controlled trials (RCTs) of Banxia Baizhu Tianma Decoction and Zexie Decoction combined with conventional western medicine for the treatment of hypertension.

Main outcome(s): Total clinical efficacy, systolic blood pressure (SBP), diastolic blood pressure (DBP).

Quality assessment / Risk of bias analysis: The quality of the included literature was evaluated according to the modified Jadad scale, and the risk bias was assessed using the Cochrane tool.

Strategy of data synthesis: RevMan5.3 statistical software was used for data analysis, and $P < 0.1$, $I^2 < 50\%$, using fixed effects model for Meta analysis; $P \leq 0.1$, $I^2 \geq 50\%$, using random effects model for Meta analysis. The main source of heterogeneity was observed by sensitivity analysis. Binary variables use relative risk (RR) to represent effect analysis statistics; continuous variables use weighted mean difference (WMD) to represent effect analysis statistics, and 95% confidence intervals are used as effect indicators for both types of variables.

Subgroup analysis: The outcome index diastolic blood pressure (DBP) and systolic blood pressure (SBP) results are heterogeneous, so the subgroup analysis is carried out according to the different types of hypertension drugs in the control group.

Sensitivity analysis: The outcome index diastolic blood pressure (DBP) and systolic blood pressure (SBP) were heterogeneous, so the heterogeneity analysis was performed.

Country(ies) involved: China.

Keywords: Banxia Baizhu Tianma decoction; Zexie decoction; hypertension; systematic review; Meta analysis.

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