

INPLASY PROTOCOL

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None declared.

Efficacy and safety of Wenxin keli combined with metoprolol tartrate in the treatment of premature ventricular contractions: a systematic review and meta-analysis

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Review question / Objective: This study is a systematic review and meta-analysis to investigate the efficacy and safety of Wenxin keli combined with metoprolol tartrate in the treatment of premature ventricular contractions and the efficacy and safety of metoprolol tartrate alone. The method of the study is a randomized controlled trial.

Condition being studied: Premature ventricular contractions, also known as premature ventricular contractions, are common clinical arrhythmias. The clinical symptoms caused by it are difficult to relieve, and the recurrence rate is extremely high. In severe cases, syncope and even sudden death may occur. At present, the commonly used antiarrhythmic drugs are chemical drugs. Studies have shown that these antiarrhythmic drugs have certain negative inotropic and negative conduction effects, and have the disadvantage of proarrhythmia. Some studies have found that Wenxin keli are effective in improving symptoms, and are weaker than chemical drugs in inhibiting the production of premature ventricular contractions and reducing the number of premature ventricular contractions. Therefore, in this study, the combination of the two was used to investigate the efficacy and safety of the two in the treatment of ventricular arrhythmia, as well as reducing the sudden death rate caused by malignant ventricular arrhythmia and prolonging the life of patients.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 29 April 2022 and was last updated on 29 April 2022 (registration number INPLASY202240171).

INTRODUCTION

Review question / Objective: This study is a systematic review and meta-analysis to

investigate the efficacy and safety of Wenxin keli combined with metoprolol tartrate in the treatment of premature ventricular contractions and the efficacy

and safety of metoprolol tartrate alone. The method of the study is a randomized controlled trial.

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METHODS

Participant or population: Patients with premature ventricular contractions.

Intervention: Wenxin keli Combined with Metoprolol Tartrate Treatment.

Comparator: Metoprolol Tartrate Treatment.

Study designs to be included: RCT.

Eligibility criteria: Patients with premature ventricular contractions need to be diagnosed by electrocardiogram or dynamic electrocardiogram, in line with the "Expert Consensus on Ventricular Arrhythmia" jointly issued by the European Heart Rhythm Association (EHRA), the American Heart Rhythm Society (HRS) and

the Asia Pacific Heart Rhythm Society (APHRS).

Information sources: The following data bases were searched: Pvbmed (from database establishment to April 2022), EMBASE (from database establishment to April 2022), The Cochrane Central Register of Controlled Trials (from database establishment to April 2022), Web of Science (from database establishment to April 2022), CNKI (from database establishment to April 2022), Wan Fang (from database establishment to April 2022), and VIP (from database establishment to April 2022).

Main outcome(s): With reference to the "Guidelines for Clinical Research of Cardiovascular Drugs" formulated by the Ministry of Health's cardiovascular system drugs and clinical pharmacology base, and the efficacy standards formulated by the Conference of Integrated Traditional Chinese and Western Medicine. Significant effect: 24-hour dynamic electrocardiogram showed no premature beats or the number of premature beats decreased by more than 90% compared with before treatment, conscious clinical symptoms were completely relieved, palpitations disappeared, chest tightness, chest pain and other clinical symptoms disappeared or improved significantly. Effective: 24-hour dynamic electrocardiogram showed that the number of premature beats was reduced by 50% to 90% compared with that before treatment, and conscious clinical symptoms were basically relieved, palpitations were significantly relieved, or other symptoms such as chest tightness and chest pain were partially relieved; Invalid: The 24-hour dynamic electrocardiogram showed that the number of premature beats decreased by less than 50% compared with that before treatment, the subjective clinical symptoms were not relieved, and the symptoms such as chest tightness and chest pain were not significantly improved or even aggravated. Summary Bureau indicators: total effective rate = (the number of markedly effective cases + the number of effective cases) / the total number of cases × 100%. Adverse

reactions: Subjective discomfort caused by taking the drug, including bradycardia, atrioventricular block, hypotension, malignant vomiting, dizziness and fatigue.

Quality assessment / Risk of bias analysis: Cochrane Collaboration's tool.

Strategy of data synthesis: Revman was selected for data analysis, $I^2 > 50\%$ and $P < 0.1$ were considered to have heterogeneity, and there was heterogeneity to select random effect combined effect size, and no heterogeneity to select fixed effect model combined effect size.

Subgroup analysis: Subgroup analysis according to age ≥ 75 years old and < 75 years old.

Sensitivity analysis: Revman software was selected for sensitivity analysis, and the sensitivity of the article was reflected by the change in effect size after deleting one of the articles.

Country(ies) involved: China.

Keywords: Wenxin keli Combined with Metoprolol Tartrate Treatment, premature ventricular contractions, efficacy, safety.

Contributions of each author:

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