INPLASY PROTOCOL

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Support: **None.**

Review Stage at time of this submission: **Formal screening of search results against eligibility criteria.**

Conflicts of interest:
None declared.

Comparative efficacy of “contact force” ablation, adenosine, cryoballoon and waiting time after PVI for freedom from arrhythmia recurrence undergoing PVI : A network meta-analysis

Xi, Y[1]; Zheng, G[2]; Ni, JY[3]; Li, Y[4]; Zhang, WY[5]; Hao, J[6].

Review question / Objective: **Among the various therapeutic strategies related to PVI, which is the most effective strategy in reducing long-term arrhythmia recurrence rate.**
Condition being studied: **The main disease studied was atrial fibrillation,and the interventions were using “contact force” catheters、injecting adenosine、a 30-minute-wait and using cryoballoon in pulmonary vein isolation.**
Information sources: **Online databases were used, including Embase, PubMed, CNKI, Cochrane Library, and Clinical trial. The Library of Hebei Medical University were browsed for related books and documents, with the administrators' help.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 12 May 2022 and was last updated on 12 May 2022 (registration number INPLASY202250076).

INTRODUCTION

Review question / Objective: **Among the various therapeutic strategies related to PVI, which is the most effective strategy in reducing long-term arrhythmia recurrence rate.**

Condition being studied: **The main disease studied was atrial fibrillation,and the interventions were using “contact force” catheters、injecting adenosine、a 30-minute-wait and using cryoballoon in pulmonary vein isolation.**

METHODS

Search strategy: Online databases were used, including Embase, PubMed, CNKI, Cochrane Library, and Clinical trial. The Library of Hebei Medical University were browsed for related books and documents, with the administrators' help.

Participant or population: Patients with atrial fibrillation that have underwent PVI.

Intervention: "contact force" ablation, adenosine, cryoballoon and a 30-minute-wait time after PVI.

Comparator: The study is network meta-analysis to compare efficacy of "contact force" ablation, adenosine, cryoballoon and waiting time after PVI for freedom from arrhythmia recurrence undergoing PVI.

Study designs to be included: Only random controlled trials.

Eligibility criteria: Patients with atrial fibrillation undergoing PVI with or without the following intraoperative techniques:using "contact force" catheters、injecting adenosine、waiting 30 minutes and using cryoballoon.

Information sources: Online databases were used, including Embase, PubMed, CNKI, Cochrane Library, and Clinical trial. The Library of Hebei Medical University were browsed for related books and documents, with the administrators' help.

Main outcome(s): Freedom from arrhythmia recurrence and freedom from acute reconnection of patients underwent PVI.

Quality assessment / Risk of bias analysis: We conduct quality assessment from the following aspects:(1)Random sequence generation (selection bias). (2)Allocation concealment (selection bias). (3)Blinding of participants and personnel (performance bias). (4)Blinding of outcome assessment (detection bias). (5)Incomplete outcome data (attrition bias). (6)Selective reporting (reporting bias). (7)Other bias.the methodological assessment of this work can be judged as a very good quality.

Strategy of data synthesis: We used bayesian model.We conducted consistency hypothesis test,homogeneity hypothesis test and similarity hypothesis test.The final results were shown in rank plots and SUCRA scores.

Subgroup analysis: Not appliable.

Sensitivity analysis: We performed sensitivity analyses for each outcome to detect potential sources of heterogeneity and to confirm the reliability of the present evidence.

Language: English.

Country(ies) involved: China.

Keywords: pulmonary vein isolation, adenosine, atrial fibrillation, smart-touch, contact force ablation, Bayesian model.

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