INPLASY

Efficacy and safety of bulleyaconitine A in the treatment of osteoarthritis: Meta-analysis

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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: INPLASY202430034

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 10 March 2024 and was last updated on 10 March 2024.

INTRODUCTION

Review question / Objective To evaluate efficacy and safety of bulleyaconitine A in the treatment of osteoarthritis. Population: adults with osteoarthritis; Intervention: Bulleyaconitine A was given orally; Comparison: other treatment; Outcome:cure rate, effective rate; Study: RCT.

Condition being studied Osteoarthritis (OA) is a chronic joint disease that is prone to middle-aged and elderly people.The main clinical manifestations were knee joint pain and joint activity disorder, among which pain was the chief complaint in clinic.Some studies have suggested that bulleyaconitine A can reduce pain and improve joint function ,and improve quality of life in patients with osteoarthritis.

METHODS

Participant or population Osteoarthritis patients, regardless of age, gender.

Intervention Bulleyaconitine A.

Comparator Conventional acupuncture, Wester n medicine, placebo, sham acupuncture, no treatment, or any combination of these.other treatment.

Study designs to be included Only randomized controlled trials(RCTs) will be included in this study.

Eligibility criteria We will included only the literature of randomized controlled trials (RCTs) of Bulleyaconitine A for OA.Nonrandomized controlled studies case reports,case series and reviews will not be included in this study.

Information sources Pubmed, Embase, Web of science,Cochrane Library, Chinese Biomedical Literatures Database(CBM), China National Knowledge infrastructure (CNKI) ,WangFang Database (WF), Chinese Scientific Journal Database (VIP).

Main outcome(s) Cure rate, effective rate.

Quality assessment / Risk of bias analysis Included randomised studies will be assessed for risk of bias by two independent raters(Min Xiao and Xiahan Huang)using the Cochrane Collaboration's tool for assessing risk of bias in randomised trials. Any disagreements will be resolved through discussion or consultation with a third reviewer(Fanglan Ma).

Strategy of data synthesis Data synthesis will be conducted with RevMan V.5.4 software provided by the Cochrane Collaboration. Before data meta-analysis, we measure the heterogeneity with a standard test. Depending on the level of heterogeneity, those studies with high heterogeneity ($p>0.10$) will use fixed-effect model. We will use the RR for dichotomous data and SMD for continuous data and mean difference with 95% CIs. Those studies with low heterogeneity ($p=0.10$), we use the random-effect model. Subgroup or sensitivity analysis will be performed if necessary. We will use qualitative analysis if there is excessive data heterogeneity.

Subgroup analysis If the necessary data are available, subgroup analysis will be carried out according to different factors as follows: Control interventions (eg, sham/ placebo moxibustion, no treatment, other TCM treatment or non-TCM treatment.

Sensitivity analysis To assess the influence of each individual study, leave-one-out sensitivity analysis was performed iteratively by removing one study at a time to confirm that the findings were not influenced by any single study.

Country(ies) involved China.

Keywords Bulleyaconitine A;Osteoarthritis.

Contributions of each author

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