

INPLASY PROTOCOL

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None declared.

INTRODUCTION

Review question / Objective: Fire needling is one of the most effective methods for the treatment of herpes zoster, especially in the acute stage of herpes zoster. The purpose of this study was to systematically evaluate the efficacy and safety of fire needling in the treatment of skin lesions of herpes zoster.

The efficacy and Safety of Fire needling in the treatment of Herpes Zoster Lesions and Pain: A Systematic Review and Meta-analysis

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Review question / Objective: Fire needling is one of the most effective methods for the treatment of herpes zoster, especially in the acute stage of herpes zoster. The purpose of this study was to systematically evaluate the efficacy and safety of fire needling in the treatment of skin lesions of herpes zoster.

Information sources: The databases of PubMed, Web of Science, The Cochrane Library, EMBASE, CBM, CNKI, Wanfang and VIP are searched by computer. The time limit is from the establishment of the database to January 2022, and the combination of subject words and free words is used.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 25 February 2022 and was last updated on 18 July 2022 (registration number INPLASY202220111).

Condition being studied: For herpes zoster, traditional Chinese medicine experts recommend fire needling, electroacupuncture, local peripheral needling, bloodletting, cupping, moxibustion and related treatments [8]. In recent years, a number of clinical studies have reported that fire needling therapy is effective in the treatment of herpes zoster, in particular, it can speed up blister-stopping, scabbing and scab removal, and

shorten the course of the disease [9]. The state of shingles lesions (blistering, crusting, and descrustation) is closely related to the course of herpes zoster and the incidence of postherpetic neuralgia. Due to the limitations of drug treatment and the further advantages of acupuncture and other therapies, systematic reviews/meta-analysis in the field of acupuncture treatment of herpes zoster have appeared since 2007 and have been increasing year by year. However, data on the actual efficacy of fire needling for herpes zoster have not been systematically assessment and confirmation. But few articles have systematically reviewed the efficacy and safety of fire needling in the treatment of herpes zoster lesions.

METHODS

Participant or population: Study subjects: Various types of patients with measurement criteria, with different sources of cases, age, race, and gender.

Intervention: Interventions: the intervention group was treated with fire needle therapy combined with electro-acupuncture, encircling needling, Cupping therapy, moxibustion and bloodletting; the control group was treated with western medicine, including oral, intravenous and topical applications. Efficiency [effective rate = (increase in dry cough, scabbing) (post-callus + total pain effect) greater than 50%), any one of the time for complete scab removal (time for complete scabbing).

Comparator: The control group was treated with Western medicine, including oral, intravenous infusion and topical use.

Study designs to be included: Study Type: randomized controlled trial (RCT).

Eligibility criteria: Inclusion criteria.(1) study types: systematic review/Meta analysis based on.exclusion criteria.(1) repeatedly published literatures only include the newly published data or data with the largest sample size; (2) systematic reviews/Meta analysis at the stage of plans and topics; (3) clinical trials for the study of post-

herpetic neuralgia are not included; (4) abstracts of conference papers. randomized controlled trials (Randomized Controlled Trial, RCT) and controlled clinical trials (Controlled Clinical Trail, CCT).(2) subjects: patients with herpes zoster in accordance with the consensus of Chinese experts[1], regardless of sex, race and time of onset.(3) intervention measures: 1 acupuncture, Zhuang medicine thread moxibustion, fire needle, moxibustion, puncture and cupping, skin acupuncture, etc., and drug therapy (such as antiviral acyclovir or traditional Chinese medicine, etc.) in the control group.(4) main outcome index: effective rate (refer to the guiding principles of Chinese New Drug Clinical Research (trial)), secondary outcome index: pain evaluation (pain relief time, visual analogue VAS score), incidence of residual neuralgia PHN.exclusion criteria.(1) repeatedly published literatures only include the newly published data or data with the largest sample size; (2) systematic reviews/Meta analysis at the stage of plans and topics; (3) clinical trials for the study of post-herpetic neuralgia are not included; (4) abstracts of conference papers.exclusion criteria.(1) repeatedly published literatures only include the newly published data or data with the largest sample size; (2) systematic reviews/Meta analysis at the stage of plans and topics; (3) clinical trials for the study of post-herpetic neuralgia are not included; (4) abstracts of conference papers.

Information sources: The databases of PubMed, Web of Science, The Cochrane Library, EMBase, CBM, CNKI, Wanfang and VIP are searched by computer. The time limit is from the establishment of the database to January 2022, and the combination of subject words and free words is used.

Main outcome(s): At a minimum, any one of the effective rates [efficiency = (healing + effective + effective) / total number of cases], the incidence of sequelae neuralgia and herpes evaluation indicators: time to stop blistering (time when herpes stops increasing), scab time (time when blisters dry up and the area of scab is greater than

50%), and time to shed (time it takes for the skin to completely shed crust).

Quality assessment / Risk of bias analysis:

The evaluation was performed according to the bias risk assessment tool provided by Cochrane Handbook 5.2.0, and Rev Man 5.3.5 software was used to generate the bias risk map. The content includes methods for generating random sequences, allocation hiding, blinding subjects and researchers, blinding outcome evaluators, incomplete outcome data, selective publication, and other biases, which can be divided into "low risk" "unclear" and "High Risk" levels.

Strategy of data synthesis:

Li and Lu used AMSTAR-2 to evaluate the methodology of the included study under the premise of hiding the author. AMSTAR-2 contains a total of 16 entries, with items 2, 4, 7, 9, 11, 13 and 15 as key entries. According to the satisfaction degree of the evaluation criteria, it is evaluated as "yes" and "no". Ruan and Lin, two evaluators, under the premise of hiding the author, aimed at efficiency, VAS score and incidence of residual neuralgia, applied GRADE to evaluate the evidence quality from five aspects of research limitation, inconsistency, indirectness, inaccuracy and publication bias, and comprehensively evaluated the evidence quality grade according to 5 downgrades and 3 upgrade conditions. The GRADE evidence body mass presented in this article may have a potential impact on the future revision of acupuncture guidelines for herpes zoster. (1) study types: systematic review / Meta analysis based on randomized controlled trials (Randomized Controlled Trial, RCT) and controlled clinical trials (Controlled Clinical Trial, CCT). (2) subjects: patients with herpes zoster in accordance with the consensus of Chinese experts, regardless of sex, race and time of onset. (3) intervention measures: 1 acupuncture, Zhuang medicine thread moxibustion, fire needle, moxibustion, puncture and cupping, skin acupuncture, etc., and drug therapy (such as antiviral acyclovir or traditional Chinese medicine, etc.) in the control group. (4) main outcome index:

effective rate (refer to the guiding principles of Chinese New Drug Clinical Research (trial)), secondary outcome index: pain evaluation (pain relief time, visual analogue VAS score), PHN occurrence of residual neuralgia (different time periods).

Subgroup analysis: None.

Sensitivity analysis: Dichotomous data will be expressed as risk ratio (RR) with 95% confidence intervals (95% CIs), and continuous data as mean difference (MD) or standard mean difference (SMD) with 95% CI. The data extraction table was made by Excel, and the consistency among evaluators was evaluated by Kappa value.

Country(ies) involved: China.

Keywords: fire needling; herpes zoster; randomized controlled trials; skin lesions; residual neuralgia; systematic review; Meta analysis.

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