INPLASY PROTOCOL

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Chinese herbs taken internally for acute gouty arthritis: an overview of systematic reviews

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Review question / Objective: To overview the systematic reviews of the Chinese herbs taken internally for acute gouty arthritis, with the aim of providing evidence to support the clinical treatment of acute gouty arthritis with Chinese medicine.

Condition being studied: Acute gouty arthritis (AGA) is a common type of inflammatory arthritis in clinic. Its pathogenesis is due to the disorder of purine metabolism in the human body, the increase or decrease of uric acid synthesis, which leads to the increase of uric acid in the blood. Sodium urate (MSU) crystals are deposited in the joints, causing local irritation, and ultimately inflammation. The main clinical manifestation of AGA is redness, swelling, heat and pain of local joints. The first metatarsophalangeal joint is the most common. With the development of the disease, gout stone, joint deformity and gouty nephropathy may occur, which brings great pain to patients. Epidemiological survey shows that in Canada and other developed countries, the incidence rate of AGA can reach 4%, and it is on the rise. In China, the incidence rate of AGA has also been in a high state, and has become the most common type of arthritis for men over 40 years old, with a trend of gradually younger. Western medicine's treatment of AGA includes various glucocorticoids, non steroidal anti-inflammatory drugs (NSAIDs), colchicines, etc, but the gastrointestinal reactions of the above drugs, liver and kidney function damage and other side effects are large, and can only alleviate symptoms, can not reduce uric acid, and prone to recurrence.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 18 November 2022 and was last updated on 18 November 2022 (registration number INPLASY2022110088).

INTRODUCTION

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METHODS

Search strategy: The computer retrieval includes SR/MA of acute gouty arthritis treated by oral administration of traditional Chinese medicine in CNKI, Wanfang, Weipu, China Biomedical Literature Database, Cochrane Library, Pubmed, EmbaseEMbase and other databases. The retrieval time is from the establishment of the database to September 20, 2022. Chinese search terms include: "acute gout", "", "acute gouty arthritis", "traditional Chinese medicine", "traditional Chinese medicine", "meta-analysis", "evidence-based evaluation", "systematic evaluation", "meta-analysis", etc. English search terms include: "Hyperuricemia", "Acute Gout", "Aucte Gouty", "Arthritis", "Meta Analysis", "Systematic Review", etc.

Participant or population: The patient should meet the clinical diagnostic criteria for acute gouty arthritis of the American College of Rheumatology (ACR).

Intervention: The observation group was treated with traditional Chinese medicine orally or added with traditional Chinese medicine on the basis of the control group The control group was treated with conventional western medicine (NSAID, colchicine, allopurinol, etc.) or traditional Chinese medicine, while the observation group was treated with traditional Chinese medicine orally or added with traditional Chinese medicine on the basis of the control group.

Comparator: The control group was treated with conventional western medicine (NSAID, colchicine, allopurinol, etc.) or traditional Chinese medicine.

Study designs to be included: SR/MA.

Eligibility criteria: Meta-analysis.

Information sources: Electronic databases, contact with authors.

Main outcome(s): Effective rate, incidence of adverse reactions, lowering uric acid level, lowering C-reactive protein, lowering erythrocyte sedimentation rate and other outcome indicators.

Data management: Excel.

Quality assessment / Risk of bias analysis: The PRISMA inventory, AMSTAR 2 scale and GRADE system were used to evaluate the quality of reports, methodology and evidence of included indicators. Use PRISMA 2020 List to evaluate the quality of reports included in the literature PRISMA 2020.

Strategy of data synthesis: The PRISMA inventory, AMSTAR 2 scale and GRADE system were used to evaluate the quality of reports, methodology and evidence of included indicators.

Subgroup analysis: Chinese medicine and western medicine or Chinese medicine plus western medicine and western medicine

Sensitivity analysis: The PRISMA inventory, AMSTAR 2 scale and GRADE system were used to evaluate the quality of reports, methodology and evidence of included indicators.

Language restriction: Languages are limited to Chinese and English.

Country(ies) involved: China (Hunan University of Chinese Medicine).

Keywords: Gout; Chinese Medicine; System review; Meta analysis; overview.

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