INPLASY PROTOCOL

Corresponding author:
Zhifu Lu

lululu_65985626@163.com

Author Affiliation:
Department of Orthopedics and Traumatology, Haikou Hospital of Traditional Chinese Medicine.

Support: None.

Review Stage at time of this submission: Completed but not published.

Conflicts of interest: None declared.

Efficacy of Acupotomy Combined with Sodium Hyaluronate versus Sodium Hyaluronate Alone in the Treatment of Knee Osteoarthritis: a Meta-analysis

Wu, QL[1]; Wu, ZQ[2]; Lu, ZF[3].

Review question / Objective: This meta-analysis aims to evaluate the efficacy of acupotomy combined with hyaluronic sodium acid compared with hyaluronic sodium acid alone in treating knee osteoarthritis.

Condition being studied: Knee osteoarthritis (KOA), also known as degenerative knee arthritis, is a common disabling disease affecting more than one-third of people over 65. The clinical manifestations include joint pain, stiffness, swelling, and reduced range of motion of the joint, leading to joint dysfunction in severe cases. The pathology is characterized by articular cartilage erosion, marginal bone hypertrophy (i.e., osteophytes), and subchondral osteosclerosis

INTRODUCTION

Review question / Objective: This meta-analysis aims to evaluate the efficacy of acupotomy combined with hyaluronic sodium acid compared with hyaluronic sodium acid alone in treating knee osteoarthritis.

Condition being studied: Knee osteoarthritis (KOA), also known as degenerative knee arthritis, is a common disabling disease affecting more than one-

third of people over 65. The clinical manifestations include joint pain, stiffness, swelling, and reduced range of motion of the joint, leading to joint dysfunction in severe cases. The pathology is characterized by articular cartilage erosion, marginal bone hypertrophy (i.e., osteophytes), and subchondral osteosclerosis.

METHODS

Participant or population: Clinically diagnosed with knee osteoarthritis

Intervention: Acupotomy combined with sodium hyaluronate injection

Comparator: Sodium hyaluronate injection alone.

Study designs to be included: Randomized controlled trials.

Eligibility criteria: (1) Sudy design: Randomized controlled trials; (2) Participants: Clinically diagnosed with knee osteoarthritis; (3) Interventions: Acupotomy combined with sodium hyaluronate injection. (4) Comparison: sodium hyaluronate injection alone. (5) Outcomes: clinical effectiveness, and Visual Analogue Scal (VAS), andLysholmscore.

Information sources: Relevant literature was searched in Cochrane Library, Pubmed, Embase, Web Of Science, SinoMed, China National Knowledge Infrastructure (CNKI), Wanfang, and China Science and Technology Journal Database (VIP) up to May 2022.

Main outcome(s): Clinical effectiveness, and Visual Analogue Scale (VAS), and Lysholm score.

Quality assessment / Risk of bias analysis: The risk of bias assessments were performed according to the Cochrane Handbook. The assessment items included: random sequence generation, allocation concealment, blinding of participants and personnel, blinding of outcome assessment, outcome data integrity, selective reporting, and other biases. Each item was judged as "High risk", "Low risk", and "Unclear".

Strategy of data synthesis: Data analysis was performed using Review Manager 5.4 software. Relative risk (RR), and weighted mean difference (WMD) with 95% confidence intervals (CIs) were used as effect sizes. If $P > 0.05$ and $I2 < 50\%$, the heterogeneity was considered low, and a fixed-effects model (FEM) was used. Otherwise, a random-effects model (REM) was selected. The funnel plot was drawn to evaluate publication bias.

Subgroup analysis: None.

Sensitivity analysis: Sensitivity analysis was performed using Stata 17.0 software to test the robustness of the results.

Country(ies) involved: China.

Keywords: Acupotomy; Meta-analysis; Knee Osteoarthritis; Sodium Hyaluronate.

Contributions of each author:
Author 1 - Qinglin Wu.
Author 2 - Zuqing Wu.
Author 3 - Zhifu Lu.