Individualized Traditional Korean Acupuncture for Knee Osteoarthritis: a Protocol for a Randomized Controlled Trial

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Objective: To test the hypotheses that individualized traditional Korean acupuncture improves pain and disability in patients with osteoarthritis of the knee and that benefits remain after stopping treatment more so than is the case for standardized minimal acupuncture.

Design: Randomized single blind controlled trial with two intervention arms (individualized traditional Korean acupuncture, standardized minimal acupuncture) of six weeks' duration and three months follow-up.

Setting: Acupuncture interventions were applied by two training doctors in the Department of Acupuncture and Moxibustion in a 1000-bed hospital. Assessment of the result was performed in a university-based laboratory.

Participants: 50 patients with symptoms of knee osteoarthritis as diagnosed by an orthopedist.

Intervention: Individualized traditional Korean acupuncture or standardized minimal acupuncture for six weeks.

Main outcome measures: Primary outcome measure was pain as measured by the visual analogue scale. Secondary measures of pain and disability included the Western Ontario and McMaster Universities (WOMAC) index, Short Form-36 (SF-36), Lequesne Functional Index (LFI) score and Korean version of Health Assessment Questionnaire (KHAQ).

Discussion: This paper presents detail on the rationale, design, methods and operational aspects of the trial.

Key Words: Knee Osteoarthritis (OA), Individual Traditional Korean Acupuncture, Standardized Minimal Acupuncture, VAS, WOMAC, Randomized Controlled Trial (RCT)

Introduction

Osteoarthritis (OA) is the most common form of chronic progressive arthritis affecting primarily elderly people¹. Worldwide, OA is the fifth largest contributor to disability life years². OA most frequently affects the knee joint³. OA of the knee is a debilitating disease that affects 52% of adults over the age of 75 years⁴. About 40-60% of subjects with radiological OA changes suffer from clinical symptoms such as pain, joint stiffness and joint deformities. OA of the knee is common and contributes greatly to morbidity in the community⁵-⁶. There is no cure for OA. Current therapies for OA are largely aimed at providing symptom relief, and include non-steroidal anti-inflammatory drugs (NSAIDs), cyclooxygenase 2 specific inhibitors and mild opioids⁷-⁸. However, chronic use of these drugs is associated with significant side-effects, for example, NSAID-