

Clinical Trial Protocol

Iranian Registry of Clinical Trials

11 Sep 2026

Efficiency of myofascial trigger points therapy in patients with bilateral knee osteoarthritis: a randomized clinical trial

Protocol summary

Summary

Knee osteoarthritis is one of the common causes of pain, joint stiffness and disability in older people. Medical and rehabilitation approaches are the cornerstone of the treatment of knee osteoarthritis. In addition, it is showed that there is a relationship between knee osteoarthritis and myofascial pain and dysfunction, in most patients, clinically. In this study we will concern with this question whether management of myofascial pain and dysfunction can contribute to treatment of knee osteoarthritis. Methods Sixty patients with bilateral knee osteoarthritis will randomly divide into two groups, control and interventional group. Control group will received 16 sessions of physiotherapy, that is, transcutaneous electrical nerve stimulation, ultrasound and hot pack, and exercises. In interventional group, in addition to routine physiotherapy, myofascial trigger point therapy will also be applied with spray and massage and stretching. Western and McMaster Universities Osteoarthritis index (WOMAC), range of motion of the knee and Timed up and Go (TUG) will be measured as variables in each group and between two groups before and after treatment with statistical tests.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138903154104N1**

Registration date: **2011-01-24, 1389/11/04**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2011-01-24, 1389/11/04

Registrant information

Name

Mohammad Rahbar

Name of organization / entity

Tabriz University of Medical Sciences

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Recruitment status

Recruitment complete

Funding source

Tabriz University of Medical Sciences

Expected recruitment start date

2008-05-14, 1387/02/25

Expected recruitment end date

2012-02-14, 1390/11/25

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Efficiency of myofascial trigger points therapy in patients with bilateral knee osteoarthritis: a randomized clinical trial

Public title

Comparison of physical therapy treatment with or without treatment of trigger points in patients with knee osteoarthritis

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: 1-Bilateral osteoarthritis. 2-Age between 20 -60 years. 3-Having American college of rheumatologic criteria. for osteoarthritis. 4-Having the

criteria of myofascial pain and dysfunction syndrome.
Exclusion criteria: 1-Patients with other rheumatologic disorders, such as rheumatoid arthritis and lupus erythematosus. 2-History of surgery of lower limbs joints. 3-History of fracture in lower limbs. 4-Severe disability, such as inability of walking with cane. 5-Contraindications for cold physical modalities, such as arterial insufficiency, raynaud phenomenon, 6-Intraarticular injection within 6 months.

Age

From **20 years** old to **60 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **60**

Randomization (investigator's opinion)

Randomized

Randomization description**Blinding (investigator's opinion)**

Single blinded

Blinding description**Placebo**

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Tabriz University of Medical Sciences

Street address

Emam Reza Hospital

City

Tabriz

Postal code**Approval date**

2008-05-14, 1387/02/25

Ethics committee reference number

87/3-6/2

Health conditions studied**1****Description of health condition studied**

knee osteoarthritis

ICD-10 code

M17.0

ICD-10 code description

Primary gonarthrosis, bilateral

Primary outcomes**1****Description**

Reducing of pain

Timepoint

Before and after intervention

Method of measurement

Visual analog scale (VAS), Western and McMaster Universities Osteoarthritis index (WOMAC) and Timed up and Go (TUG)

2**Description**

improved function

Timepoint

Before and after intervention

Method of measurement

VAS, WOMAK, and TUG Test

3**Description**

ROM

Timepoint

Before and after intervention

Method of measurement

Goniometer

Secondary outcomes**1****Description**

myofascial pain and dysfunction syndrome

Timepoint

before and after treatment

Method of measurement

clinical examination

Intervention groups**1****Description**

Massage in intervention group

Category

Rehabilitation

2**Description**

Spray with stretch in intervention group

Category

Rehabilitation

3

Description

routine physiotherapy in Intervention group

Category

Rehabilitation

4

Description

routine physiotherapy in control group

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Emam Reza Hospital

Full name of responsible person

Mohammad Rahbar

Street address

City

Tabriz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Tabriz university of medical sciences

Full name of responsible person

Dr. E'raf Oskuee

Street address

Tabriz university of medical sciences

City

Tabriz

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Tabriz university of medical sciences

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

empty

Person responsible for general inquiries

Contact

Name of organization / entity

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Full name of responsible person

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Position

Faculty member/ assistant professor

Other areas of specialty/work

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty
Study Protocol
empty
Statistical Analysis Plan
empty
Informed Consent Form
empty

Clinical Study Report
empty
Analytic Code
empty
Data Dictionary
empty