Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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
Country
Iran (Islamic Republic of)
Phone
+98 41 1544 6694
Email address
rahbarm@tbzmed.ac.ir

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 erythematous. 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
Tabriz university of medical sciences
Full name of responsible person
Mohammad Rahbar
Position
Faculty member/ assistant professor
Other areas of specialty/work
Street address
Physical medicine and rehabilitation center of Emam Reza hospital
City
Tabriz
Postal code
Phone
+98 41 1337 3967
Fax
Email
rahbarm@tbzmed.ac.ir
Web page address

Person responsible for scientific inquiries

Contact
Name of organization / entity
Tabriz university of medical sciences
Full name of responsible person
Mohammad Rahbar
Position
Physiatrist/ assistant professor
Other areas of specialty/work
Street address
Emam Reza Hospital
City
Tabriz
Postal code
Phone
+98 41 1337 3967
Fax
Email
rahbarm@tbzmed.ac.ir
Web page address

Person responsible for updating data

Contact
Name of organization / entity
Full name of responsible person
Mohammad Rahbar
Position
Other areas of specialty/work
Street address
City
Postal code
Phone
Fax
Email
Web page address

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