Clinical Trial Protocol
Iranian Registry of Clinical Trials

09 Nov 2026

Comparison the effects of acupuncture, physical modality and home based exercise training on symptoms of knee osteoarthritis

Protocol summary

Summary

Aim: to compare the effects of acupuncture, physical modality and home based exercise training on symptoms of knee osteoarthritis. Patients: all patients with knee osteoarthritis, according to American college of rheumatology (ACR) criteria, referred to the clinic of physical therapy in Firoozgar hospital, Tehran, Iran. Main inclusion criteria were knee pain lasting for 6 months or longer and age between 40-65 years. Main exclusion criteria were receiving NSAIDs during study and exacerbation of symptoms. Sixty patients with knee osteoarthritis were randomly divided into three groups (A,B and C) .The acupuncture group (A) received only acupuncture at selected acupoint for knee pain; the physical modality group (B) received TENS (transcutaneous Electrical Nerve Stimulation), ultrasound and hot pack at pain areas .The exercise group (C) received isometric exercise of the knee. Each group received treatment 3 sessions per week for 4 weeks. Evaluating measurement tools were Visual Analogue Scale (VAS) for pain intensity and KOOS questionnaire for function.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138811163284N1**
Registration date: **2009-04-21, 1388/02/01**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2009-04-21, 1388/02/01

Registrant information

Name

Dr Bijan Forogh

Name of organization / entity

Iran University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 21 8214 1229

Email address

bijhanfr@iums.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice Chancellor for Research, Iran univercity of medical sciences

Expected recruitment start date

2009-04-21, 1388/02/01

Expected recruitment end date

2009-11-30, 1388/09/09

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison the effects of acupuncture, physical modality and home based exercise training on symptoms of knee osteoarthritis

Public title

Effects of acupuncture, physiotherapy and exercise training on knee arthrosis

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: 1-Male and female with knee pain lasting for 6 months or longer 2-Age between 40-65 years 3-Normal neurological examination 4-At least one osteophyte at tibiofemoral joint (Kellgren- Lawrence

grade >2) 5-Not receiving intra articular injection from 3 months ago 6- Not consuming NSAIDs during last week before study 7-No history of knee surgery 8-No history of treatment with acupuncture 9-No history of cancer, pregnancy and secondary osteoarthritis. Exclusion criteria: 1-Low adherence to treatment 2-Receiving NSAIDs during study 3-Exacerbation of symptoms.

Age
From **40 years** old to **65 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
Vice Chancellor for Research, Iran univercity of medical sciences

Street address
Hemmat highway

City
Tehran

Postal code

Approval date
empty

Ethics committee reference number
8512

Health conditions studied

1

Description of health condition studied
Knee Osteoarthritis

ICD-10 code
M17.1

ICD-10 code description
Other primary gonarthrosis

Primary outcomes

1

Description
pain, symptoms, and activities of daily living

Timepoint
Before and after treatment

Method of measurement
Koos questionnare

2

Description
Pain

Timepoint
Before and after treatment

Method of measurement
Visual Analogue Scale (VAS)

Secondary outcomes

empty

Intervention groups

1

Description
The acupuncture group (A): acupuncture at selected acupoint for knee pain, 3 sessions per week for 4 weeks

Category
Rehabilitation

2

Description
The physical modality group (B): TENS (transcutaneous electrical nerve stimulation), ultrasond and hot pack at pain areas, 3 sessions per week for 4 weeks.

Category
Rehabilitation

3

Description
The exercise group (C):isometric exercise of the knee, 3 sessions pr week for 4 weeks

Category
Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center
Firoozgar hospital

Full name of responsible person
Dr Bijan Forogh, MD

Street address
Behafarin street

City
Tehran

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice Chancellor for Research, Iran univercity of medical sciences
Full name of responsible person
Dr Said Abbas Motavalian
Street address
Hemmat highway
City
Tehran
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Vice Chancellor for Research, Iran univercity 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
Iran univercity of medical sciences
Full name of responsible person
Dr Mohammad Saleki, MD
Position
Sport medicin resident
Other areas of specialty/work
Street address
Firoozgar Hospital
City
Tehran
Postal code
Phone
+98 21 8214 1229
Fax
+98 21 8894 2970
Email
drsaleki@yahoo.com , tannaz.ahadi@yahoo.com
Web page address

Person responsible for scientific inquiries

Contact
Name of organization / entity
Iran univercity of medical sciences
Full name of responsible person
Dr Tannaz Ahadi, MD
Position
Assistant Professor / Physiatrist
Other areas of specialty/work
Street address
Firoozgar Hospital, Behafarin street
City
Tehran
Postal code
Phone
+98 21 8214 1229
Fax
+98 21 8894 2970
Email
drsaleki@yahoo.com , tannaz.ahadi@yahoo.com
Web page address

Person responsible for updating data

Contact
Name of organization / entity
Iran univercity of medical sciences
Full name of responsible person
Dr Mohammad Saleki, MD
Position
Sport medicine resident
Other areas of specialty/work
Street address
Firoozgar Hospital, Behafarin street
City
Tehran
Postal code
1593748711
Phone
+98 21 8214 1229
Fax
+98 21 8894 2970
Email
drsaleki@yahoo.com
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*