

Clinical Trial Protocol

Iranian Registry of Clinical Trials

02 Jul 2026

Comparison of the Effects of Magnet therapy and Electroacupuncture in the treatment of the Knee joint Osteoarthritis

Protocol summary

Study aim

The aim of this research is comparing the effects of magnet therapy, electroacupuncture and conventional physiotherapy. This study is single-blind clinical trial. Ninety three patients will refer to the Fattemieh physiotherapy clinic in Rafsanjan. Three intervention of this study are magnet therapy, electroacupuncture and conventional physiotherapy.

Design

In this study 3 group treatments will done through parallel design and assesses during 1st, 10th sessions and one month later

Settings and conduct

Assessor evaluate the patients then refer Fattemieh physiotherapy clinic in Rafsanjan city and then divided them in to 3 equal groups.

Participants/Inclusion and exclusion criteria

Inclusion: aged 45-75 years, Knee pain more than 3 months, ability of walking, osteophyte in the knee, reduction of joint space, cripitation of the knee movement, grade 2 and 3 osteoarthritis of the knee and primary osteoarthritis of the knee. Exclusion: Injection of corticosteroid during previous 1 month, fracture and dislocation of the knee, previous surgery of the knee, pregnancy, rheumatoid arthritis, sever knee osteoarthritis (grade 4) and leaving of study.

Intervention groups

First group will receive magnet therapy by magnet set (made in Iran, magno 915 G model 20 HZ, 65 G intensity and using for 20 minutes). Second group will receive electroacupuncture (needle is inserted to acupuncture points of knee osteoarthritis, then electrical stimulation connect to patients by stimulator set (made in chin, Ying Di 808 model, 3 HZ and during for 20 minutes). Third group (conventional Physiotherapy) are include ultrasound set (made in Iran, 250 P model, Infrared and Transcutaneous Electrical Nerve Stimulation (TENS) by stimulator set (made in Iran, 620 F) that applies for 20 minutes.

Main outcome variables

Pain intensity in rest, 6 minute walking test and WOMAC scale.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20100129003220N11**

Registration date: **2020-10-11, 1399/07/20**

Registration timing: **registered_while_recruiting**

Last update: **2020-10-11, 1399/07/20**

Update count: **0**

Registration date

2020-10-11, 1399/07/20

Registrant information

Name

Dadollah Shahimoridi

Name of organization / entity

Rafsanjan University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 39 1822 0040

Email address

d_shahimoridi@rums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-08-13, 1399/05/23

Expected recruitment end date

2021-01-12, 1399/10/23

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the Effects of Magnet therapy and Electroacupuncture in the treatment of the Knee joint Osteoarthritis

Public title

The effects of magnet therapy and electroacupuncture on treatment of Knee joint osteoarthritis

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

aged 45-75 years Knee pain more than 3 months ability of walking osteophyte in the Knee reduction of joint space crepitation of the Knee movements grade 2 and 3 osteoarthritis primary osteoarthritis of the Knee

Exclusion criteria:

Injection of corticosteroid during previous 1 month fracture and dislocation of the knee previous surgery of the knee pregnancy rheumatoid arthritis sever knee osteoarthritis (grade 4) leaving of study

Age

From **45 years** old to **75 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant
- Outcome assessor

Sample size

Target sample size: **93**

Randomization (investigator's opinion)

Randomized

Randomization description

Patients are divided into three groups by block randomization with size 3, includes 31 blocks of 3 with block sequence within = 1, 2, 3 in the program Create a blocked randomization list.

Blinding (investigator's opinion)

Double blinded

Blinding description

In this study the assessor and patient are not aware from treatment but therapist is aware from treatment.

Placebo

Not used

Assignment

Other

Other design features**Secondary Ids**

empty

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

The ethics committee of Rafsanjan University of Medical Sciences

Street address

Central organization of Rafsanjan University of Medical Sciences, Emam Ali Blvd

City

Rafsanjan

Province

Kerman

Postal code

7717893591

Approval date

2020-08-11, 1399/05/21

Ethics committee reference number

IR.RUMS.REC.1399.125

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

Knee osteoarthritis

ICD-10 code

M19.0

ICD-10 code description

Primary osteoarthritis of other joints

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

Pain intensity in rest

Timepoint

1st, 10th sessions and one month later

Method of measurement

By Visual Analogue Scale (VAS)

2**Description**

6 minutes walking test

Timepoint

1st, 10th sessions and one month later

Method of measurement

By Chronometer

3**Description**

Western Ontario and McMaster University Osteoarthritis Index (WOMAC)

Timepoint

1st, 10th sessions and one month later

Method of measurement

By questionnaire

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: First group will receive magnet therapy by magnet set (made in Iran, Magno 915 G model, 20 HZ, 65 G intensity and using for 20 minutes).

Category

Rehabilitation

2

Description

Intervention group: Second group will receive electroacupuncture (needle is inserted to acupuncture points of knee osteoarthritis, then electrical stimulation connect to patients by stimulator set (made in chin, Ying Di 808 model, 3 HZ and during for 20 minutes).

Category

Rehabilitation

3

Description

Intervention group: Third group (conventional Physiotherapy) are include ultrasound set (made in Iran, 250 P model, Infrared and Transcutaneous Electrical Nerve Stimulation (TENS) by stimulator set (made in Iran, 620 F) that applies for 20 minutes.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Fattemieh physiotherapy clinic

Full name of responsible person

Dadollah Shahimoridi

Street address

Alley 20 Moalem street

City

Rafsanjan

Province

Kerman

Postal code

7717893591

Phone

+98 34 3426 3118

Fax

+98 34 3428 0097

Email

d.shahimoridi@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Rafsanjan University of Medical Sciences

Full name of responsible person

Hamid Ostad Ebrahimi

Street address

Educational Assistant, central organization, of Rafsanjan university of medical sciences, Emam Ali Blvd

City

Rafsanjan

Province

Kerman

Postal code

7717893591

Phone

+98 34 3428 0000

Email

hostadebrahimi@yahoo.com

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Rafsanjan University of Medical Sciences

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

Rafsanjan University of Medical Sciences

Full name of responsible person

Dadollah Shahimoridi

Position

Academic member

Latest degree

Master

Other areas of specialty/work

Physiotherapy

Street address

Educational Assistant, central organization, of Rafsanjan university of medical sciences, Emam Ali Blvd

City

Rafsanjan

Province

Kerman
Postal code
7717893591
Phone
+98 34 3426 3118
Email
d.shahimoridi@gmail.com

Person responsible for scientific inquiries

Contact

Name of organization / entity
Rafsanjan University of Medical Sciences
Full name of responsible person
Dadollah Shahimoridi
Position
Academic member
Latest degree
Master
Other areas of specialty/work
Physiotherapy
Street address
Educational Assistant, central organization, of
Rafsanjan university of medical sciences, Emam Ali
Blvd
City
Rafsanjan
Province
Kerman
Postal code
7717893591
Phone
+98 34 3426 3118
Fax
+98 34 3428 0097
Email
d.shahimoridi@gmail.com

Person responsible for updating data

Contact

Name of organization / entity

Rafsanjan University of Medical Sciences
Full name of responsible person
Dadollah Shahimoridi
Position
Academic member
Latest degree
Master
Other areas of specialty/work
Physiotherapy
Street address
Educational Assistant, central organization, of
Rafsanjan university of medical sciences, Emam Ali
Blvd
City
Rafsanjan
Province
Kerman
Postal code
7717893591
Phone
+98 34 3426 3118
Fax
+98 34 3428 0097
Email
d.shahimoridi@gmail.com

Sharing plan

Deidentified Individual Participant Data Set (IPD)

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

Because of publish of article

Study Protocol

No - There is not a plan to make this available

Statistical Analysis Plan

No - There is not a plan to make this available

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

No - There is not a plan to make this available

Analytic Code

No - There is not a plan to make this available

Data Dictionary

No - There is not a plan to make this available