Clinical Trial Protocol
Iranian Registry of Clinical Trials

09 Nov 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

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Rafsanjan University of Medical Sciences

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Fax
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Email
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Person responsible for updating data

Contact

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Rafsanjan University of Medical Sciences

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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