

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

29 Jun 2026

### Comparing the effectiveness of magnet therapy ,acupuncture and isometric exercise in patients with chronic and moderate knee osteoarthritis.

#### Protocol summary

##### Study aim

Comparing the effectiveness of magnet therapy ,acupuncture and isometric exercise in patients with chronic and moderate knee osteoarthritis

##### Design

Three arm parallel group design sixty patients,non - randomised ,non blinded,clinical trial

##### Settings and conduct

Three groups patients ,in each group twenty patients , thorough physician's opinion and days of week that patients refer to clinic,they have divided in three groups.each group under treatment with magnet therapy ,acupuncture or isometric exercise for six weeks in physical medicine and rehabilitation clinic of baqiyatallah hospital,and before first session of treatment and two months after termination of treatment western Ontario and McMaster universities in knee osteoarthritis (WOMAC ) and visual analogue scale (VAS) questionnaires were filled.

##### Participants/Inclusion and exclusion criteria

Inclusion Criteria:knee osteoarthritis grade 2,ROM at least 100 degree,age between 45 - 65 years,history knee osteoarthritis at least 3 years,bilateral knee osteoarthritis  
Exclusion criteria:acute injury,advanced knee osteoarthritis,infection in injection site,history previous treatment such as corticosteroids,NSAIDS,supplements,magnet therapy ,acupuncture and massage in 3 -6 months ago,history febrile or infectious disease or patient s disagreement,patients with pace maker or any metal device in the body,chronic and malignant disease

##### Intervention groups

Three groups ,in each group twenty patients,each group under treatment with magnet therapy and isometric exercise,acupuncture and isometric exercise and isometric exercise , through physician's opinion and days of week that they have referred to clinic.patients in

isometric exercise group are in the cotrol group of this study.

##### Main outcome variables

pain severity,range of motion.

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20181017041371N1**

Registration date: **2019-01-06, 1397/10/16**

Registration timing: **retrospective**

Last update: **2019-01-06, 1397/10/16**

Update count: **0**

##### Registration date

2019-01-06, 1397/10/16

##### Registrant information

##### Name

Fayeze Hakimi

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 21 2252 5793

##### Email address

fa.hakimi@yahoo.com

##### Recruitment status

##### Recruitment complete

##### Funding source

##### Expected recruitment start date

2018-05-22, 1397/03/01

##### Expected recruitment end date

2018-10-23, 1397/08/01

##### Actual recruitment start date

empty

**Actual recruitment end date**  
empty

**Trial completion date**  
empty

**Scientific title**  
Comparing the effectiveness of magnet therapy ,acupuncture and isometric exercise in patients with chronic and moderate knee osteoarthritis.

**Public title**  
Magnet therapy ,acupuncture and isometric exercise in treatment knee osteoarthritis

**Purpose**  
Treatment

**Inclusion/Exclusion criteria**  
**Inclusion criteria:**  
Knee osteoarthritis grade 2 Range of motion knee at least 100 degree Age between 45 to 65 years old History knee osteoarthritis at least 3 years Bilateral knee osteoarthritis  
**Exclusion criteria:**  
History acute knee injury Advanced knee osteoarthritis Infection in injection site History treatment with corticosteroids,NSAIDS,supplements ,magnet therapy,acupuncture and massage in 3-6 months ago History intra-articular injection in 3-6 months ago History of infectious or febrile disease,disagreement of patients Patients with pace maker or metal device in body Chronic disease such as heart,lung,liver,renal diseases,malignant tumors,active bleeding

**Age**  
From **45 years** old to **65 years** old

**Gender**  
Both

**Phase**  
3

**Groups that have been masked**  
*No information*

**Sample size**  
Target sample size: **60**

**Randomization (investigator's opinion)**  
Not randomized

**Randomization description**

**Blinding (investigator's opinion)**  
Not blinded

**Blinding description**

**Placebo**  
Not used

**Assignment**  
Parallel

**Other design features**

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Ethics committee of baqiyatallah University of medical science

##### Street address

Sheikh bahaei Ave,Vanak square

##### City

Tehran

##### Province

Tehran

##### Postal code

1435916471

#### Approval date

2018-04-16, 1397/01/27

#### Ethics committee reference number

IR.BMSU.REC.1397.051

## Health conditions studied

### 1

#### Description of health condition studied

Knee osteoarthritis

#### ICD-10 code

#### ICD-10 code description

## Primary outcomes

### 1

#### Description

western Ontario and McMaster universities osteoarthritis index(Womac score(knee)

#### Timepoint

Before initiation treatment and 2 months after termination treatment

#### Method of measurement

Womac score

### 2

#### Description

pain severity

#### Timepoint

Before initiation treatment and 2 months after termination treatment

#### Method of measurement

visual analogue score(VAS)

### 3

#### Description

range of motion

#### Timepoint

Before initiation treatment and 2 months after termination treatment

#### Method of measurement

Goniometer

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

In this study isometric exercise has been done for all patients. first group that only receive isometric exercise are control group of this study.

#### Category

Treatment - Other

### 2

#### Description

in patients in Intervention group1: magnet therapy with magnotherap (2 channel magnet +2 channel multi stimulator 3 session 30 minutes weekly for 6 weeks in 10th protocol magnetic device ,in 30 minutes and intensity 35 and simultaneously isometric exercise 3 sessions 30 minutes or 6 sessions 15 minutes weekly for 6 weeks has been done.

#### Category

Treatment - Other

### 3

#### Description

Intervention group: in patients that they are in intervention group 2 acupuncture 3 session 30 minutes weekly for 6 weeks (18 sessions 30 minutes) and simultaneously isometric exercise 3 sessions 30 minutes weekly or 6 sessions 15 minutes weekly for 6 weeks has been done. in patients who are in control group for isometric exercise 3 sessions weekly for 30 minutes or 6 sessions 15 minutes weekly for 6 weeks has been done.

#### Category

Treatment - Other

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Baqiyatallah hospital

##### Full name of responsible person

Fayeze Hakimi

##### Street address

Sheikh bahaei Ave., Vanak square

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Tehran

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1435916471

##### Phone

+98 21 8248 2365

##### Email

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## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Bagheiat-allah University of Medical Sciences

##### Full name of responsible person

Gholamhossein Alishiri

##### Street address

Sheikh Bahaei Ave, Vanak Square

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##### Email

r.bmsu@yahoo.com

##### Web page address

##### Grant name

##### Grant code / Reference number

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

Yes

##### Title of funding source

Bagheiat-allah 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

Bagheiat-allah University of Medical Sciences

##### Full name of responsible person

Fayeze Hakimi

##### Position

resident of physical medicine and rehabilitation

##### Latest degree

Medical doctor

##### Other areas of specialty/work

Physical Medicine

##### Street address

No. 12 , Salimi Alley, Amir Kianoush street , Mellat Square , North Majidie

##### City

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##### Province

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## Person responsible for scientific inquiries

**Contact**

**Name of organization / entity**

Bagheiat-allah University of Medical Sciences

**Full name of responsible person**

Mahsa Asheghan

**Position**

Associate professor

**Latest degree**

Specialist

**Other areas of specialty/work**

Physical Medicine

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## Person responsible for updating data

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**Position**

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**Latest degree**

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**Other areas of specialty/work**

Physical Medicine

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## Sharing plan

**Deidentified Individual Participant Data Set (IPD)**

Yes - There is a plan to make this available

**Study Protocol**

Yes - There is a plan to make this available

**Statistical Analysis Plan**

Yes - There is a plan to make this available

**Informed Consent Form**

Yes - There is a plan to make this available

**Clinical Study Report**

Yes - There is a plan to make this available

**Analytic Code**

Yes - There is a plan to make this available

**Data Dictionary**

Yes - There is a plan to make this available

**Title and more details about the data/document**

Accessibility to all information is possible

**When the data will become available and for how long**

Immediately after published

**To whom data/document is available**

Everyone

**Under which criteria data/document could be used**

Without any limitations

**From where data/document is obtainable**

Fayeze Hakimi fa.hakimi@yahoo.com

**What processes are involved for a request to access data/document**

With email ,about 2 days

**Comments**