

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Sep 2026

Evaluation of the effectiveness of Lumbosacral Manipulation versus knee exercise in patients with Patellofemoral Pain Syndrome

Protocol summary

Registration timing: **registered_while_recruiting**

Study aim

The aim of present study was evaluation the effectiveness of lumbosacral manipulation versus knee exercise in patients with patellofemoral pain Syndrome in 501 Artesh hospital in 1396.

Design

Clinical trial with a control group with parallel groups, one-blind, randomized.

Settings and conduct

This study was conducted as a clinical trial in Imam Reza Hospital and in patients with patellofemoral pain, this is a one-blind study in which patients will blinded. This is in phase 4 and in this 18 patients with a block method are divided into two groups, 9 patients in intervention group and receive manipulation, and 9 patients in control and receiving routine treatment. Based on this, at first and one month after starting treatment, patellofemoral pain is assessed.

Participants/Inclusion and exclusion criteria

Patients with patellofemoral syndrome, referring to the medical physics clinic of 501 hospital with satisfaction to participate in the study was included in the study, also patients with radiculopathy, osteoarthritis tibiofemoral grade 2 and higher, history of knee surgery and history of knee trauma, will excluded from the study.

Intervention groups

In the control group, only knee exercises were used, and in the intervention group, lumbosacral manipulation with knee exercises were used.

Main outcome variables

Patellofemoral Pain

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20180416039324N1**

Registration date: **2019-04-06, 1398/01/17**

Last update: **2019-04-06, 1398/01/17**

Update count: **0**

Registration date

2019-04-06, 1398/01/17

Registrant information

Name

Sirous Azizi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 21 4382 3476

Email address

s.azizi@ajaums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-04-06, 1398/01/17

Expected recruitment end date

2019-11-08, 1398/08/17

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation of the effectiveness of Lumbosacral Manipulation versus knee exercise in patients with Patellofemoral Pain Syndrome

Public title

Evaluation of the effectiveness of Lumbosacral Manipulation in patients with Patellofemoral Pain

Syndrome

Purpose
Treatment

Inclusion/Exclusion criteria
Inclusion criteria:
Patellofemoral syndrome Referring to the Medical Physics Clinic of 501 hospital Satisfaction to participate in the study
Exclusion criteria:
Radiculopathy Tibiofemoral Osteoarthritis Grade 2 and higher History of knee surgery History of knee trauma

Age
No age limit

Gender
Both

Phase
4

Groups that have been masked

- Participant

Sample size
Target sample size: **18**

Randomization (investigator's opinion)
Randomized

Randomization description
A simple randomization is done with sealed envelope tools in such a way that the letters A and B are inserted in the envelopes and patients are asked to select an envelope that the intervention group A and the group B they will be tested.

Blinding (investigator's opinion)
Single blinded

Blinding description
This means that patients in any groups do not know the used approaches in another group.

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Medical University for the Islamic Republic of Iran's Army

Street address

1411718541, Medical University for the Islamic Republic of Iran's Army, Etemadzadeh Avenue, West Fatemi St., Tehran, Iran

City

Tehran

Province

Tehran

Postal code
1411718541

Approval date
2018-06-01, 1397/03/11

Ethics committee reference number
IR.AJAUMS.REC.1397.006

Health conditions studied

1

Description of health condition studied

Patellofemoral Pain Syndrome

ICD-10 code

M22.2

ICD-10 code description

Patellofemoral disorders

Primary outcomes

1

Description

Patellofemoral Pain

Timepoint

Initially and one month after the intervention

Method of measurement

Radiographic examinations include AP, Lateral and Patellar View of the knee as well as Lumbosacral Manipulation group with walking analysis and range of motion knee.

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: In this group lumbosacral manipulation with knee exercises are used.

Category

Treatment - Devices

2

Description

Control group: In this group only knee exercises are used.

Category

Treatment - Devices

Recruitment centers

1

Recruitment center

Name of recruitment center

Imam Reza Hospital

Full name of responsible person

Elahe Shirzadi

Street address

1411718541, Medical University for the Islamic
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elaheh_shirzady@yahoo.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Artesh University of Medical Sciences

Full name of responsible person

Mostafa Shahrezaee

Street address

1411718541, Medical University for the Islamic
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Grant name

Grant code / Reference number

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

Yes

Title of funding source

Artesh 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

Artesh University of Medical Sciences

Full name of responsible person

Elahe Shirzadi

Position

Resident of Physical Medicine and Rehabilitation

Latest degree

Medical doctor

Other areas of specialty/work

Physical Medicine

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Person responsible for scientific inquiries

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Person responsible for updating data

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

Undecided - It is not yet known if there will be a plan to
make this available

Study Protocol

Undecided - It is not yet known if there will be a plan to
make this available

Statistical Analysis Plan

Undecided - It is not yet known if there will be a plan to
make this available

Informed Consent Form

Undecided - It is not yet known if there will be a plan to
make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to
make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to
make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to
make this available