

Clinical Trial Protocol

Iranian Registry of Clinical Trials

02 Jul 2026

The effect of hip and knee muscles strength exercises in the water with or without use of kinesiotapes) as instant and long term (in improvement of pain, dynamic performance, Disability and the balance in women patients Patellofemoral pain syndrome

Protocol summary

Study aim

The main purpose of this study was to study the effect of strengthening exercises in the thigh and knee muscles in water with and without Kinesiotape (on an on-going and long-term basis) on pain, motor function, disability, balance and quality of life in women with PFPS.

Design

In this study, 45 women with this Patellofemoral pain syndrome were randomly assigned into three groups without kinesiotape (15) and water therapy with kinesiotape (15 patients) and water therapy kinesiotape was permanent (15 people)

Settings and conduct

The present study is a semi-experimental research based on the research design, the method of selecting the subjects, the measurement tools and the intervention, and the research design was pre-test and post-test on the three experimental groups, which for 8 weeks were as (Three sessions a week) conducted the exercises with the appropriate mentor's guidance.

Participants/Inclusion and exclusion criteria

Including Entry Requirements:Diagnosis and confirmation of the presence of patellofemoral pain syndrome by a specialist Positive Clark's test and Patellar Apprehension Womens aged 18 to 45 years Not participating in other sports activities Exclusion criteria: Diseases like osteoarthritis, joint diseases Having an artificial joints in the leg Performing knee surgery in the past Use of pain medications for knee pain in the present Affected by diseases that affect the variables of balance such as: Having no proper vision or any visual impairment, having an internal ear venereal disease

Intervention groups

three groups without kinesiotape (15) and water therapy with kinesiotape (15 patients) and water therapy kinesiotape was permanent (15 people)

Main outcome variables

Reduced pain, increased motor function, decreased disability, increased stagnation in the form of static and dynamic, increased quality of life

General information

Reason for update

Acronym

PFPS

IRCT registration information

IRCT registration number: **IRCT20171205037757N1**

Registration date: **2018-01-17, 1396/10/27**

Registration timing: **retrospective**

Last update: **2018-01-17, 1396/10/27**

Update count: **0**

Registration date

2018-01-17, 1396/10/27

Registrant information

Name

Marzieh Mokhtari Karchegani

Name of organization / entity

The University of tehran

Country

Iran (Islamic Republic of)

Phone

+98 31 3775 8601

Email address

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2016-11-05, 1395/08/15
Expected recruitment end date
2017-01-29, 1395/11/10
Actual recruitment start date
2016-11-05, 1395/08/15
Actual recruitment end date
2017-01-10, 1395/10/21
Trial completion date
empty

Scientific title

The effect of hip and knee muscles strength exercises in the water with or without use of kinesiotapes) as instant and long term (in improvement of pain, dynamic performance, Disability and the balance in women patients Patellofemoral pain syndrome

Public title

Water therapy to improve patellofemoral pain syndrome

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Diagnosis and confirmation of the presence of patellofemoral pain syndrome by a specialist Positive Clark's test and Patellar Apprehension Womens aged 18 to 45 years Not participating in other sports activities

Exclusion criteria:

Diseases like osteoarthritis, joint diseases Having an artificial joints in the leg Performing knee surgery in the past Use of pain medications for knee pain in the present Affected by diseases that affect the variables of balance such as: Having no proper vision or any visual impairment, having an internal ear venereal disease

Age

From **18 years** old to **45 years** old

Gender

Female

Phase

2

Groups that have been masked

- Participant
- Care provider
- Investigator
- Data analyser

Sample size

Target sample size: **45**

Randomization (investigator's opinion)

N/A

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

The researcher has by no means interfered in test neither in pre-test before exercise or post-test after exercise as the tests were given by individuals who had no clue about the plan.the participants were not alert of test application as well and just acted to instruction.The person who analyzed the data did not know about the study and generally looked at the data.

Placebo

Not used
Assignment
Parallel
Other design features
Use kinesiotape the water

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Hamedan University of Medical Sciences

Street address

Pajohesh Intersection ., Mahdiah Street

City

Hamedan

Province

Hamadan

Postal code

65178

Approval date

2017-01-14, 1395/10/25

Ethics committee reference number

IR.UMSHA.REC.1395.468

Health conditions studied

1

Description of health condition studied

Patellofemoral pain syndrome

ICD-10 code

M00-M99

ICD-10 code description

Diseases of the musculoskeletal system and connective tissue

Primary outcomes

1

Description

The amount of Visual pain

Timepoint

At the beginning of the study before the intervention and 60 days after the exercises

Method of measurement

Use the Visual Analogue Scale ruler

2

Description

The amount of pain

Timepoint

At the beginning of the study before the intervention and 60 days after the exercises

Method of measurement

Using the McGill Pain Questionnaire

3

Description

Motor function

Timepoint

At the beginning of the study before the intervention and 60 days after the exercises

Method of measurement

Use the Kujala questionnaire

4

Description

Disability

Timepoint

At the beginning of the study before the intervention and 60 days after the exercises

Method of measurement

Van Kurf et al. Disability questionnaire

5

Description

Dynamic balance

Timepoint

At the beginning of the study before the intervention and 60 days after the exercises

Method of measurement

Biodegrade System balance

6

Description

Static balance

Timepoint

At the beginning of the study before the intervention and 60 days after the exercises

Method of measurement

Biodegrade System balance

7

Description

Quality of Life

Timepoint

At the beginning of the study before the intervention and 60 days after the exercises

Method of measurement

Sherbourne SF36 Questionnaire

Secondary outcomes

empty

Intervention groups

1

Description

First Intervention group: water therapy without

kinesiotape (n=15), A two-month-long therapeutic exercise without the use of a kinesiotape

Category

Rehabilitation

2

Description

Second Intervention group: water therapy with temporary kinesiotaping (n=15), A two-month-long therapeutic exercise using short-term kinesiotap

Category

Rehabilitation

3

Description

Third Intervention group: water therapy with permanent kinesiotaping (n=15), A two-month-long exercise therapy using long-term kinesiotap

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Besat Hospital

Full name of responsible person

Maryam Bashiri

Street address

Besat Hospital, Motahari BlvdDi, strict 2, Hamedan

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

The University of Bu-Ali Sina

Full name of responsible person

Ali Yalfani

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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
The University of Bu-Ali Sina
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
The University of Bu-Ali Sina
Full name of responsible person
Marzieh Mokhtari Karchegani
Position
Masters Student
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Web page address

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

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

No - There is not a plan to make this available

Title and more details about the data/document

Data and documentation can be shared, but with unidentifiable individuals and private information for subjects

When the data will become available and for how long

Starting data access 1 year after printing results

To whom data/document is available

Researchers in this field are allowed to act for documentation

Under which criteria data/document could be used

Only the type of analysis that can be done in the research can be redefined

From where data/document is obtainable

mokhtari.marzieh.1371@gmail.com

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

When the applicant submits a document for his / her work area in relation to the subject matter of the thesis, and if the request is reasonable and the commitment not to misuse the data of this research, the data will be sent to him within 1 week of work.

Comments