

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Sep 2026

Comparing two treatments of patellofemoral pain syndrome, routine approach and based on risk factors according to pain and function, among patients visited in sport medicine

Protocol summary

Summary

To do this research, people under 40 years old referred to Sports Medicine Clinic of Tehran University of Medical Sciences during years 2011-2012 according to the criteria for diagnosis of patellofemoral pain syndrome and inclusion criteria are chosen. Two questionnaires which included visual analog scale (pain assessment) and Kujala (performance evaluation) will be completed by the patients. The patients will be evaluated for several risk factors including 1-pes planus or pes cavus 2-leg length discrepancy 3-patellar malalignment 4-illiotibial band tightness 5-hamstring tightness 6-gastrocnemius tightness 7-iliopsoas shortness 8-patellar hypermobility. Then the patients are randomly divided into two groups, group A receive routine treatments that includes taking pain medications, quadriceps isometric contraction and straight leg rising. Group B in addition to routine treatments, based on risk factor assessment, receive risk factor correction therapy too. Both groups after treatment and a 3-month follow up period will fill questionnaires of visual analog scale and Kujala again. At the end pain and function changes before and after intervention are measured in both groups. Comparing the results in both treatment groups, the effectiveness of such therapy is determined based on the amount of risk factors.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201010305050N1**

Registration date: **2011-04-14, 1390/01/25**

Registration timing: **prospective**

Last update:

Update count: **0**

Registration date

2011-04-14, 1390/01/25

Registrant information

Name

Zahra Hamed

Name of organization / entity

Clinic of sport medicine, Tehran university of medical sciences

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Tehran university of medical sciences

Expected recruitment start date

2011-04-21, 1390/02/01

Expected recruitment end date

2011-08-23, 1390/06/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparing two treatments of patellofemoral pain syndrome, routine approach and based on risk factors according to pain and function, among patients visited in sport medicine

Public title

Treatment of anterior knee pain according to risk factor

correction

Purpose
Treatment

Inclusion/Exclusion criteria
Inclusion criteria: having at least 3 of these signs/symptoms: 1.pain during stair climbing or squat exercise, running, cycling, long sitting in bending knee position 2.patellar grinding 3.positive physical tests. Exclusion criteria are any history of knee trauma or operation, history of rheumatologic disease, history of knee osteoarthritis and any interventional treatment.

Age
From **18 years** old to **40 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **60**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Double blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Tehran university of medical sciences

Street address
Sport medicine clinic, No. 7, Jalal al ahmad Ave

City
Tehran

Postal code
1411734143

Approval date
2010-09-23, 1389/07/01

Ethics committee reference number
89-04-53-11991

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
pain

Timepoint
at begining of study and 3month later

Method of measurement
questioner

2

Description
function

Timepoint
at begining of study and 3 months later

Method of measurement
Kujala Function Score Questionnaire

Secondary outcomes

1

Description
EMG changing

Timepoint
at begening and 3 months later

Method of measurement
surface EMG

Intervention groups

1

Description
group A: regardless of risk factors, routin treatment that includes perscription of narcotic drugs and quadriceps isometric exercise is done 3 times per day with 8 repitition each time holding for 10-15 soconds and straight leg rising 3 times per day with 8 repitition for 3 months.

Category
Rehabilitation

2

Description
group B: In addition to treatments in group A, receive treatment and correction of found risk factors in physical exam including: 1-appropriate shoes and insoles for pess planus or pess cavus 2-heel lift for leg lenth discrepancy 3-taping and strengthen of vastus medialis obliquus muscle for patellar malalignment 4-illiotibial band stretching for illiotibial band tightness 5-stretching of hamstring muscles for hamstring tightness 6-stretching of gastrocnemius muscle for gastrocnemius tightness

7-hip extension exercise for iliopsoas tightness 8-treatment of patellar hypermobility with taping, brace and strengthening exercise of patellar stabilator muscles

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Sport medicine clinic of Tehran university of medical sciences

Full name of responsible person

Dr. Zahra Hamed

Street address

Sport medicine clinic, No. 7, Jalal al ahmad Ave

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research, Tehran University of Medical Sciences

Full name of responsible person

Dr. farzin Halabchi

Street address

Sport medicine clinic, No. 7, Jalal al ahmad Ave

City

Tehran

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Vice chancellor for research, Tehran University of Medical Sciences

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

empty

Person responsible for general inquiries

Contact

Name of organization / entity

Tehran university of medical sciences

Full name of responsible person

Dr Zahra Hamed

Position

Rezident of sport medicine

Other areas of specialty/work

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Position

certified board

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty