Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Comparison of effect of two taping method (kinesio and Mcconnell) and their effect on functional activities and pain in athlete with patellofemoral pain syndrome

Protocol summary

Summary

Objectives: Comparison of two taping techniques (kinesio and Mcconnell) and their effect on functional activities and pain in athlete with patellofemoral pain syndrome. Design: This is a randomized clinical trial. Thirty athletes will be randomly assigned tothree groups: kinsio taping؛ Mcconnell taping and control groups. Participants: 30 athletes aged 18-35 years old will tak part in the study. Inclusion critria: unilateral anterior or retropatellar knee pain؛ existance of symptoms for at least 1 month and an average pain level of 3 on visual analog scale. Exclusion critria: history of patellar dislocation؛ bilateral PFP؛ had an allergy to adhesive tape؛ referred pain from the lumbar spine and hip joint. Interventions: for kinsio taping group VMO muscls to the facilities type. For Mcconnell taping group mechanical correction of patellar done by pulling the patella to medial. For control group will not perform any taping. Iindividuals in both groups will be assessed for pain؛ Vertical Jump؛ agility؛ Sprint؛ balance and Muscle strength Before؛ immediately after intervention ,24 hr and 48 hr after intervention. Main Outcome Measures: Quadriceps muscle strength؛ pain level using the 10-cm visual analog scale؛ agility by shuttle running test؛ Sprint running؛ Vertical Jump by sargent jump teat and Reach distance that normalize by dividing the distance by the participants' leg length during Y balance test performance.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015012420764N1**
Registration date: **2015-05-10, 1394/02/20**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2015-05-10, 1394/02/20

Registrant information

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Mahlegha Mortazavi
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Shiraz School of Rehabilitation, Shiraz University of Medical Sciences
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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research of University of Medical Sciences

Expected recruitment start date

2014-10-23, 1393/08/01

Expected recruitment end date

2015-01-21, 1393/11/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of effect of two taping method (kinesio and Mcconnell) and their effect on functional activities and pain in athlete with patellofemoral pain syndrome

Public title

The effect of taping on performance in athletes with patellofemoral pain syndrome

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion critria: behind or around the patella pain resulting from at least two of the following activities: prolonged sitting, ascending or descending the stairs, prolonged walking, squatting, running, kneeling, and hopping or jumping؛ existance of symptoms for at least 1؛ lateral shift of patella؛ tight lateral structure of knee؛ Average pain score ≥3 cm on a 10-cm visual analog scale (VAS) at the time of the evaluation؛ and at least grade 11 in Functional Index Questionnaire. Exclusion critria: a history of patellar dislocation or subluxatio؛ bilateral PFP,had an allergy to adhesive tape؛ referred pain from the lumbar spine and hip joint؛ severe leg length discrepancy more 2 cm؛ patella tendinitis (‘Jumper’s knee’)؛ tibial tubercle apophysitis (Osgood Schlatters disease)؛ bursitis; infrapatella fat pad lesion (Hoffa’s syndrome).

Age

From **18 years** old to **35 years** old

Gender

Female

Phase

2-3

Groups that have been masked

No information

Sample size

Target sample size: **30**

Randomization (investigator's opinion)

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 Shiraz University of Medical Sciences

Street address

Shiraz University of Medical Sciences, Zand Ave

City

Shiraz

Postal code

Approval date

2014-11-19, 1393/08/28

Ethics committee reference number

CT-9375-7215

Health conditions studied

1

Description of health condition studied

Patellofemoral pain syndrome

ICD-10 code

M94.2

ICD-10 code description

Chondromalacia

Primary outcomes

1

Description

Pain

Timepoint

Before ,immediately after intervention ,24 hr and 48 hr after intervention

Method of measurement

Visual analog scale

2

Description

Reach distance in dynamic balance

Timepoint

Before ,immediately after intervention ,24 hr and 48 hr after intervention

Method of measurement

Tape

3

Description

Vertical jump

Timepoint

Before ,immediately after intervention ,24 hr and 48 hr after intervention

Method of measurement

Tape

4

Description

Sprint

Timepoint

Before ,immediately after intervention ,24 hr and 48 hr after intervention

Method of measurement

Chronometer

5

Description

Measurement of isometric quadriceps muscle

Timepoint

Before ,immediately after intervention ,24 hr and 48 hr

after intervention

Method of measurement

Dynamometer

6

Description

Shuttle running(agility)

Timepoint

Before ,immediately after intervention ,24 hr and 48 hr after intervention

Method of measurement

Chronometer

Secondary outcomes

empty

Intervention groups

1

Description

For first group McConnell taping will apply to correct the position of the patella layer was applied from lateral femoral condyle to just posterior of the medial femoral condyle. The patella will completely covered by the base layer. Second layer will attached from the lateral patellar border to posterior of medial condyle.

Category

Rehabilitation

2

Description

For second group The kinsio taping will apply from the direction of origin to insertion with 25-50% of its maximal length tension: which was proposed to provide muscle facilitation effect.

Category

Rehabilitation

3

Description

For control group will not perform any taping

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center

Ghadir sports club

Full name of responsible person

Ms Zaravar

Street address

Shiraz School of Rehabilitation, First Abiverdi Ave, Chamran Boulevard.

City

Shiraz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice-Chancellery for Research of Shiraz University of Medical Sciences

Full name of responsible person

Dr. Mohammad Ali Sahmeddini

Street address

Vice-Chancellery of Research, Shiraz University of Medical Sciences, Zand Ave

City

Shiraz

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Vice-Chancellery for Research of Shiraz 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

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Full name of responsible person

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Person responsible for scientific

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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