Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Comparison of effects of Kinesio taping versus McConnell taping on function and dynamic postural control in athletes with patellofemoral pain syndrome

Protocol summary

Study aim
To compare the effects of Kinesio taping versus McConnell taping on function and dynamic postural control in athletes with patellofemoral pain syndrome.

Design
Parallel groups, single blinded, single setting randomized control trial

Settings and conduct
Spine Physiotherapy Clinic, Sahiwal.

Participants/Inclusion and exclusion criteria
Inclusion Criteria • Referred athletes with chronic PFPS, Patients diagnosed with chronic PFPS, Subject not received taping before, Subject not receiving any pain killer or medical treatment, Positive Clark's test , Age: 18 to 40 years, Both gender Exclusion Criteria Patients with history of: Ankle and hip pathology, Any other knee abnormality or arthritis, Lower limb fracture, Subject using corticosteroids, Pregnancy, Irritation from taping,Surgery

Intervention groups
60 athlete patients were randomly allocated into 2 groups, 30 patients in each group. Group A patient were treated with Kinesio taping while Group B patients were treated with McConnell taping technique. Randomization of patients into groups were done by mean of lottery method. Taking in account an inclusion and exclusion criteria before enrolling them in this study. Informed consent was considered in written about their willingness in the study. Volunteers was provided with the detailed information i.e. both verbal and written regarding the study procedure. Both groups receive conventional therapy, that was TENS, ultrasound and quadriceps exercises

Main outcome variables
• Functional Activity was assessed by using lower extremity functional scale • Postural and Dynamic Control measured by star excursion balance test

General information

Reason for update

Acronym
PFPS

IRCT registration information
IRCT registration number: **IRCT20200611047734N1**
Registration date: **2020-06-17, 1399/03/28**
Registration timing: **retrospective**

Last update: **2020-06-17, 1399/03/28**
Update count: **0**

Registration date
2020-06-17, 1399/03/28

Registrant information

Name
AYESHA RAZZAQ

Name of organization / entity
King Edward Medical University,Lahore

Country
Pakistan

Phone
+92 61 6521475

Email address
drayesharazzak@gmail.com

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2019-12-01, 1398/09/10

Expected recruitment end date
2020-06-01, 1399/03/12

Actual recruitment start date
2019-12-01, 1398/09/10

Actual recruitment end date
2020-06-01, 1399/03/12

Trial completion date
2020-06-01, 1399/03/12

Scientific title
Comparison of effects of Kinesio taping versus McConnell taping on function and dynamic postural control in athletes with patellofemoral pain syndrome

Public title
Comparison of effects of Kinesio taping versus McConnell taping on function and dynamic postural control in athletes with patellofemoral pain syndrome

Purpose
Treatment

Inclusion/Exclusion criteria
Inclusion criteria:
• Referred athletes with chronic patellofemoral pain syndrome. • Patients diagnosed with chronic PFPS• Subject not received taping before• Subject not receiving any pain killer or medical treatment • Positive Clark's test • Age: 18 to 40 years• Both gender
Exclusion criteria:
Patients with history of: • Ankle and hip pathology• Any other knee abnormality or arthritis• Lower limb fracture• Subject using corticosteroids • Pregnancy • Irritation from taping• Surgery

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

Gender
Both

Phase
2

Groups that have been masked
- Participant

Sample size
Target sample size: **60**
More than 1 sample in each individual
Number of samples in each individual: **30**
30 patient diagnosed with PFPS was randomly allocated in each group
Actual sample size reached: **60**
More than 1 sample in each individual
Actual sample size in each individual: **30**
30 patient diagnosed with PFPS was randomly allocated in each group

Randomization (investigator's opinion)
Randomized

Randomization description
The patients having diagnosed patellofemoral pain syndrome was recruited in the study by convenient sampling, and the patients who fulfilled the inclusion and exclusion criteria was selected, with similar baseline characteristics. The consent was taken from the subjects to participate in the study. It was a single blinded trial in which the assessor was kept blind. The subjects was randomly assigned to one of two groups by using a lottery method, using a restricted randomization scheme to assure equal numbers in each group. Random allocation to all groups was ensured, from all study personnel and participants by entry of data.

Blinding (investigator's opinion)
Single blinded

Blinding description
it was a single blinded trial in which participant/ patients were kept blind about the 2 of treatment technique which was provided to them during management session.

Placebo
Not used

Assignment
Parallel

Other design features
Parallel groups, single blinded, single setting

Secondary Ids
empty

Ethics committees

1

Ethics committee
Name of ethics committee
institutional review board
Street address
1 km, Bhobatiyan chowk, Raiwind road
City
Lahore
Postal code
0544

Approval date
2019-12-01, 1398/09/10

Ethics committee reference number
IRB-UOL-FAHS/657/2019

Health conditions studied

1

Description of health condition studied
patellofemoral pain syndrome

ICD-10 code
M25.56

ICD-10 code description
Pain in knee

Primary outcomes

1

Description
• Functional Activity

Timepoint
Baseline and after 24 hour

Method of measurement
lower extremity functional scale

2

Description
• Postural and Dynamic Control

Timepoint

Baseline and after 24 hour

Method of measurement

Star excursion balance test

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: 60 athlete patients were randomly allocated into 2 groups, 30 patients in each group. Group A patient were treated with Kinesio taping. Taking in account an inclusion and exclusion criteria before enrolling them in this study. Informed consent was considered in written about their willingness in the study. Volunteers was provided with the detailed information i.e. both verbal and written regarding the study procedure. Both groups receive conventional therapy, that was TENS, ultrasound and quadriceps exercises. Assessment was done before and after the application of tape. For the baseline measure, Pre tape assessment, which was measured just before the application of tape, Post taping assessment after 24 hours while tape still in place and follow up measurement after 24 hours of tape removal. Pre tape assessment was used as baseline measurement. Excursion Balance Test (SEBT) was used for the measurement actual dynamic postural control. To measure the functional activity LEFS was be used. SEBT assessment was done in i.e. anterior, posteromedial, and posterolateral direction. Group A (Kinesio taping): - Kinesio taping plusTENS plus ultrasound plus quadriceps exercises. Dosage: - o K-taping for 24 hourso Ultrasound = 1MHZ, 0.8W/cm2, for 4 minutes o TENS= 100Hz, 50 µ s pulse, 20 minutes.o Quadriceps exercise = 10 times repetition

Category

Treatment - Devices

2

Description

Intervention group: 60 athlete patients were randomly allocated into 2 groups, 30 patients in each group. Group B patient were treated with McConnell taping. Taking in account an inclusion and exclusion criteria before enrolling them in this study. Informed consent was considered in written about their willingness in the study. Volunteers was provided with the detailed information i.e. both verbal and written regarding the study procedure. Both groups receive conventional therapy, that was TENS, ultrasound and quadriceps exercises. Assessment was done before and after the application of tape. For the baseline measure, Pre tape assessment, which was measured just before the application of tape, Post taping assessment after 24 hours while tape still in place and follow up measurement after 24 hours of tape removal. Pre tape assessment was used as baseline measurement. Excursion Balance Test (SEBT) was used for the measurement actual dynamic postural control. To measure the functional activity LEFS was be used. SEBT assessment was done in i.e. anterior, posteromedial, and posterolateral direction. Group B (McConnell taping): - McConnell taping+ TENS+ ultrasound+ quadriceps exercises. Dosage: - o M-taping for 24 hourso Ultrasound = 1MHZ, 0.8W/cm2, for 4 minutes o TENS= 100Hz, 50 µ s pulse, 20 minutes.o Quadriceps exercise = 10 times repetition

Category

Treatment - Devices

Recruitment centers

1

Recruitment center

Name of recruitment center

Spine Physiotherapy Clinic, Sahiwal.

Full name of responsible person

Naeem Aslam

Street address

spine clinic, 21 main fateh sher road sahiwal

City

Sahiwal

Postal code

57000

Phone

+92 40 4462978

Email

naeemaslam693@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

University of Lahore

Full name of responsible person

Umair Ahmad

Street address

1 km, Raiwind road

City

lahore

Postal code

0544

Phone

+92 42 35963421

Email

umairahmad@gmail.com

Grant name

student

Grant code / Reference number

NA

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

No

Title of funding source

Academic support Only

Proportion provided by this source

20

Public or private sector

Private

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

University of Lahore

Full name of responsible person

Naeem Aslam

Position

consultant physiotherapist

Latest degree

Master

Other areas of specialty/work

Physiotherapy

Street address

spine clinic, 21 main fateh sher road

City

Sahiwal

Province

punjab

Postal code

57000

Phone

+92 40 4462978

Email

naeemaslam693@gmail.com

Person responsible for scientific inquiries

Contact

Name of organization / entity

University of Lahore

Full name of responsible person

Arooj Fatima

Position

assistant Professor

Latest degree

Ph.D.

Other areas of specialty/work

Physiotherapy

Street address

1 km, Raiwind road

City

Lahore

Province

punjab

Postal code

0544

Phone

+92 42 35963421

Email

aruj43@hotmail.com

Person responsible for updating data

Contact

Name of organization / entity

University of Lahore

Full name of responsible person

Naeem Aslam

Position

consultant physiotherapist

Latest degree

Master

Other areas of specialty/work

Physiotherapy

Street address

spine clinic, 21 Main Fateh sher road, Sahiwal

City

Sahiwal

Province

punjab

Postal code

57000

Phone

+92 40 4462978

Email

naeemaslam693@gmail.com

Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is 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

Title and more details about the data/document

Comparison of effects of Kinesio taping versus McConnell taping on function and dynamic postural control in athletes with patellofemoral pain syndrome

When the data will become available and for how long

It will be available after study completion and publication

To whom data/document is available

academic institute To researchers for study only.Patient data will not be shown

Under which criteria data/document could be used

under the usage with terms in which journal is accessed /processed for publication, and on request

From where data/document is obtainable

from the University office and Responsible supervisor and from journal we will process in future

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

It will be only used in confidential way for improving research and benefit of humanity can call or mail

Comments

data can bee provided on request