Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

Comparing the immediate effect of distal versus proximal-distal kinsiotape on muscle strength, functional performance and gait initition profiles in athletes with and without functional ankle instability

Protocol summary

Study aim

Comparing the immediate effect of distal versus proximal-distal kinsiotape on muscle strength, functional performance and gait initition profiles in athletes with and without functional ankle instability

Design

In this study, 15 healthy athletes and 15 athletes with functional ankle instability will be chosen purposefully according to the inclusion criteria.

Settings and conduct

This study will be performed in Biomechanics laboratory of Tehran University of Medical sciences.

Participants/Inclusion and exclusion criteria

Inclusion and Exclusion criteria in this study will be according to the position statement of the International Ankle Consortium for selection criteria for patients with chronic ankle instability in controlled research.Athletes aged 18 to 32 with a history of ankle sprain, at least six months to one year old, with no history of fracture or other musculoskeletal injuries, will participate in this study.

Intervention groups

Interventions in each groups(healthy athletes and athletes with functional ankle instability) are as follows: Distal Kinsio Taping Intervention: kinsio tape is applied on peroneus longus muscle to facilitate it. Proximal-distal kinsio taping intervention: in this intervention, in addition to facilitation technique for Peroneus Longus, facilitating kinsio tape for gluteus medius is used too.

Main outcome variables

Strength of hip abductors and ankle evertors; Functional performance tests; Temporal and spatial parameters of center of pressure(anticipatory, weight transfer and locomotive phase) in gait initiation

General information

Reason for update

Acronym

Comparing the two method of taping on muscle strenght and gait profiles in athletes

IRCT registration information

IRCT registration number: **IRCT20171028037057N1**
Registration date: **2018-01-17, 1396/10/27**
Registration timing: **registered_while_recruiting**

Last update: **2018-01-17, 1396/10/27**
Update count: **0**

Registration date

2018-01-17, 1396/10/27

Registrant information

Name

Sara Fereydounnia

Name of organization / entity

Tehran University of Medical Sciences

Country

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Recruitment status

Recruitment complete

Funding source

Tehran University of Medical Sciences

Expected recruitment start date

2017-12-21, 1396/09/30

Expected recruitment end date

2018-07-22, 1397/04/31

Actual recruitment start date

empty

Actual recruitment end date
empty
Trial completion date
empty

Scientific title
Comparing the immediate effect of distal versus proximal-distal kinsiotape on muscle strength, functional performance and gait initition profiles in athletes with and without functional ankle instability

Public title
Comparing the immediate effect of distal versus proximal-distal tape on muscle strength, functional performance and gait initition profiles in athletes with and without functional ankle instability
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
Ages of participants ranged from18 to 32 year old A history of ankle sprain in one foot (6 months-1 year needed have be passed since the initial injury and repeated ankle sprain needed to have occurred at least once during this period and participants also needed to feel ‘giving way’ in their ankles) Foot and Ankle Ability Measure (FAAM): ADL scale<90%; Sport scale <80% Fibular mobility test and fibula position in inferior tibiofibular must be normal.
Exclusion criteria:
Pain and restriction in both ankles during the test and inability to perform hopping History of surgery in ankle History of diabetes, visual disturbances, vestibular disorders, dizziness, neurological disorders, musculoskeletal trauma in lower limbs, and cognitive problems Exercise extensively before the test Inability to do the test Losing balance during the test Reluctance of participants to do the test Skin allergy to kinsio tape
Age
From **18 years** old to **32 years** old
Gender
Both

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **30**
Randomization (investigator's opinion)
N/A
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 Medicine faculty of Tehran University of Medical sciences
Street address
Building No.1, the northern door of university, Poursina street, Ghods st, Enghelab Avenue
City
Tehran
Province
Tehran
Postal code
1417755354
Approval date
2017-12-16, 1396/09/25
Ethics committee reference number
IR.TUMS.MEDICINE.REC.1396.4255

Health conditions studied

1

Description of health condition studied
Disorder of ligament
ICD-10 code
M24.2
ICD-10 code description
Instability secondary to old ligament injury

Primary outcomes

1

Description
Strenght of the hip abductor muscles
Timepoint
Before the intervention, 30 minutes after the intervention
Method of measurement
It is calculated in nioton using handhend dynamommeter.

2

Description
Strenght of the ankle evertor muscles
Timepoint
Before the intervention, 30 minutes after the intervention
Method of measurement
It is calculated in nioton using handhend dynamommeter.

3

Description
Side Hop Test
Timepoint
Before the intervention, 30 minutes after the intervention
Method of measurement
It is calculated in second using chronometer.

4

Description
Figure of 8 Hop Test
Timepoint
Before the intervention, 30 minutes after the intervention
Method of measurement
It is calculated in second using chronometer.

5

Description
Star Excursion Balance Test
Timepoint
Before the intervention, 30 minutes after the intervention
Method of measurement
It is calculated in centimeter using tape.

6

Description
Reaction Phase Time
Timepoint
Before the intervention, 30 minutes after the intervention
Method of measurement
It is calculated in milisecond using force plate and Excel software.

7

Description
Anticipatory Phase Time
Timepoint
Before the intervention, 30 minutes after the intervention
Method of measurement
It is calculated in milisecond using force plate and Excel software.

8

Description
COP displacement in anteroposterior and mediolateral direction in anticipatory phase
Timepoint
Before the intervention, 30 minutes after the intervention
Method of measurement
It is calculated in centimeter using force plate and Excel software.

9

Description
COP displacement in anteroposterior and mediolateral direction in weight transfer phase
Timepoint
Before the intervention, 30 minutes after the intervention
Method of measurement
It is calculated in centimeter using force plate and Excel software.

10

Description
COP displacement in anteroposterior and mediolateral direction in locomotive phase
Timepoint
Before the intervention, 30 minutes after the intervention
Method of measurement
It is calculated in centimeter using force plate and Excel software.

11

Description
Speed of COP displacement in anteroposterior and mediolateral direction in anticipatory phase
Timepoint
Before the intervention, 30 minutes after the intervention
Method of measurement
It is calculated in centimeter on second using force plate and Excel software.

12

Description
Speed of COP displacement in anteroposterior and mediolateral direction in weight transfer phase
Timepoint
Before the intervention, 30 minutes after the intervention
Method of measurement
It is calculated in centimeter on second using force plate and Excel software.

13

Description
Speed of COP displacement in anteroposterior and mediolateral direction in locomotive phase
Timepoint
Before the intervention, 30 minutes after the intervention
Method of measurement
It is calculated in centimeter on second using force plate and Excel software.

Secondary outcomes

empty

Intervention groups

1

Description
Proximal- distal kinsio taping intervention: In this intervention, in addition to facilitation technique for Peroneus Longus, facilitating kinsio taping for gluteus medius is used too. For taping gluteus medius, participant lie down with the affected h

Category
Rehabilitation

2

Description
Distal Kinsio Taping Intervention: Distal kinsio taping is applied on peroneus longus muscle to facilitate it. The participant position is supine or long sitting. The anchor of kinsio tape is applied to fibular head. The ankle is planter flexed and inv

Category
Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center
school of Rehabilitation, Tehran University of Medical Sciences

Full name of responsible person
Sara Fereydounnia, PT, Ph.D Candidate, TUMS

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Number 336, Next to Safialishah Street, Piche Shemiran, Enghelab Avenue

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
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Full name of responsible person
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Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?
No

Title of funding source
Deputy for Research

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
Tehran University of Medical Sciences

Full name of responsible person
Sara Fereydounnia

Position
Pt, Ph.D Candidate

Latest degree
Master

Other areas of specialty/work
Rehabilitation management

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School of Rehabilitation, No:336, Next to Safialishah Street, Piche Shemiran, Enghelab Avenue

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Person responsible for updating data

Contact
Name of organization / entity
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Sharing plan

Deidentified Individual Participant Data Set (IPD)
No - There is not a plan to make this available
Justification/reason for indecision/not sharing IPD
Because sharing IPD is useless according to the our study, We should consider all the sample size.
Study Protocol
Yes - There is a plan to make this available
Statistical Analysis Plan
Not applicable
Informed Consent Form
Yes - There is a plan to make this available
Clinical Study Report
Yes - There is a plan to make this available
Analytic Code
Not applicable
Data Dictionary
Yes - There is a plan to make this available
Title and more details about the data/document
The results of the primary outcome measure will be shared.
When the data will become available and for how long
These data will become available 2 months after publication.
To whom data/document is available
The results will be available for people working in academic instutions.
Under which criteria data/document could be used
people can use the data only for the rehabilitative purposes.
From where data/document is obtainable
Miss Sara Fereydounnia will be in charge of communication via E-mail: s-fereydounnia@razi.tums.ac.ir
What processes are involved for a request to access data/document
After receiving the request and the main purposes for needing the data, we will response to the request maximally to one month.
Comments