Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Investigation of Dynamic Biomechanical Indices in Athletes with And without Hamstring Shortness and Comparing the Effectiveness of Kinesio-Tape and Static Stretching on Hamstring Shortness According to this Data

Protocol summary

Study aim

1.Determination of biomechanical Data during slow/ fast walking and running in athletes with and without hamstring tightness 2.Determination of biomechanical Data during slow/ fast walking and running before and after static stretching in athletes with hamstring tightness 3. Determination of biomechanical Data during slow/ fast walking and running before and after kinesio-tapping and static stretching in athletes with hamstring tightness 4. Comparison of biomechanical Data during slow/ fast walking and running between kinesio-tapping and static stretching group and static stretching group in athletes with hamstring tightness

Design

A factorial group randomized control clinical trial, non blinded

Settings and conduct

According to the high incidence of hamstring tightness, this research is performed to compare biomechanical Data during functional tasks between two group of athletes with hamstring tightness that static stretching and static stretching + kinsiotapping is applied them.

Participants/Inclusion and exclusion criteria

Inclusion criteria: healthy men (18-32 years old) with hamstring tightness Exclusion criteria: Previous hamstring disorders

Intervention groups

1- Control group: athletes without hamstring tightness 2- Intervention group: athletes with hamstring tightness and static stretching intervention 3- Intervention group: athletes with hamstring tightness and static stretching + kinesio-tapping intervention

Main outcome variables

Biomechanical Data

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20130121012210N7**
Registration date: **2019-05-30, 1398/03/09**
Registration timing: **prospective**

Last update: **2019-05-30, 1398/03/09**
Update count: **0**

Registration date

2019-05-30, 1398/03/09

Registrant information

Name

Azadeh Shadmehr

Name of organization / entity

Teharn University of Medical Sciences

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-05-31, 1398/03/10

Expected recruitment end date

2019-07-23, 1398/05/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date
empty

Scientific title
Investigation of Dynamic Biomechanical Indices in Athletes with And without Hamstring Shortness and Comparing the Effectiveness of Kinesio- Tape and Static Stretching on Hamstring Shortness According to this Data

Public title
Investigation of Dynamic Biomechanical Indices of Effectiveness of Kinesio- Tape and Static Stretching on Hamstring Shortness

Purpose
Treatment

Inclusion/Exclusion criteria
Inclusion criteria:
males that 3 times a week has minimum o 2 hours sport activity without any symptoms of previous hamstring injury bilateral hamstring shortness 30 degrees of popliteal angle in active SLR test
Exclusion criteria:
lower limb surgeries physiotherapy intervention in last two months

Age
From **18 years** old to **32 years** old

Gender
Male

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **15**

Randomization (investigator's opinion)
Randomized

Randomization description
According to the patient file, each patient has been named by one special code and then for each of therapeutic sessions , patient codes are determined by use of statistical software.

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 Tehran University of Medical Sciences
Street address
Keshavarz Blvd, Central Building of Trhran University of Medical Sciences
City
Tehran
Province
Tehran
Postal code
1417653761

Approval date
2019-03-17, 1397/12/26

Ethics committee reference number
IR.TUMS.VCR.REC.1398.016

Health conditions studied

1

Description of health condition studied
hamstring thightness

ICD-10 code
M25.6

ICD-10 code description
Stiffness of joint, not elsewhere classified

Primary outcomes

1

Description
Dynamic Biomechanical Indices

Timepoint
before-after

Method of measurement
biomechanical smart insole

Secondary outcomes

empty

Intervention groups

1

Description
First Intervention group: In this group, Kinesio- Tape + Static Stretching are applied on the hamstring muscle. After use of kinesio-tape, static hamstring stretch 3 times (30s stretch with 10s resting time) is down and kinesio-tape is remained for 30 minutes.

Category
Rehabilitation

2

Description
Second Intervention group: In this group, Static hamstring stretch 3 times (30s stretch with 10s resting time) is performed.

Category
Rehabilitation

3

Description
Control group: This group is consist of athletes without hamstring shortness and they don't receive any intervention.
Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
School of Rehabilitation,Tehran University of Medical Sciences
Full name of responsible person
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Sponsors / Funding sources

1

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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
Tehran University of Medical Sciences
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
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Azadeh Shadmehr
Position
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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
There is no more Data
Study Protocol
No - There is not a plan to make this available
Statistical Analysis Plan
No - There is not a plan to make this available
Informed Consent Form
No - There is not a plan to make this available
Clinical Study Report
No - There is not a plan to make this available
Analytic Code
No - There is not a plan to make this available
Data Dictionary
Not applicable