

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 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)

Phone

+98 21 7752 8468

Email address

shadmehr@tums.ac.ir

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

Azadeh Shadmehr

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Enghelab Street, Piche Shemiran, School of Rehabilitation

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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?

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

Full name of responsible person

Azadeh Shadmehr

Position

Professor

Latest degree

Ph.D.

Other areas of specialty/work

Physiotherapy

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Person responsible for scientific inquiries

Contact

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Position

PhD student

Latest degree

Master

Other areas of specialty/work

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Person responsible for updating data

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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