

Clinical Trial Protocol

Iranian Registry of Clinical Trials

14 Jul 2026

The effect of leg kinesio taping on plantar pressure variables, balance and proprioception in athletes with shin splint

Protocol summary

Study aim

The purpose of this study is to investigate the effect of leg kinesio taping on plantar pressure variables, balance and proprioception in athletes with shin splint.

Design

Clinical trial with placebo control group, with parallel groups, single blinded, randomized

Settings and conduct

The tests will be carried out by the specialists at the Sport Rehabilitation Laboratory of Bu-Ali Sina University in Hamadan, and then interventions will take place in the gym. During the testing, the participant will be unaware of the main purpose of the research.

Participants/Inclusion and exclusion criteria

The inclusion criteria included: Having exercise-induced pain in the leg on the posteromedial tibia border, Pain on palpation of the posteromedial tibia for at least five centimeters, and exclusion criteria including: History of fractures and lower limb surgery during the last six months, Participate in leg rehabilitation programs over the past six months.

Intervention groups

"Intervention group": kinesio taping group (kinesio tape with violet color ATEX brand made in South Korea) will be applied to the muscles of the tibialis anterior with %75 tension for 24 hours, then plantar pressure, balance and ankle proprioception will be measured before, immediately and one day after the kinesio taping.
"Control Placebo group": control placebo group (kinesio tape with yellow color ATEX brand made in South Korea) intervention as the first intervention group but without tension will be applied to the muscles of the tibialis anterior for 24 hours, then plantar pressure, balance and ankle Proprioception will be measured before, immediately and one day after the kinesio taping.
therefore, the first group really applied kinesiotape and the second group will be applied as placebo kinesiotape.

Main outcome variables

Disorder in plantar pressure distribution, balance and

ankle proprioception.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20210629051737N1**

Registration date: **2021-09-06, 1400/06/15**

Registration timing: **retrospective**

Last update: **2021-09-06, 1400/06/15**

Update count: **0**

Registration date

2021-09-06, 1400/06/15

Registrant information

Name

amir shayesteh

Name of organization / entity

Bu Ali Sina University

Country

Iran (Islamic Republic of)

Phone

+98 25 3890 4910

Email address

a.shayesteh@phe.basu.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-12-31, 1399/10/11

Expected recruitment end date

2021-03-06, 1399/12/16

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of leg kinesio taping on plantar pressure variables, balance and proprioception in athletes with shin splint

Public title

The effect of leg kinesio taping on plantar pressure variables, balance and proprioception

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Having exercise-induced pain in the leg on the posteromedial tibia border Pain on palpation of the posteromedial tibia for at least five centimeters

Exclusion criteria:

History of fractures and lower limb surgery during the last six months Participate in leg rehabilitation programs over the past six months

Age

From **20 years** old to **32 years** old

Gender

Male

Phase

N/A

Groups that have been masked

- Participant

Sample size

Target sample size: **24**

Randomization (investigator's opinion)

Randomized

Randomization description

Randomization was done by simple method and by lottery. The participant randomly selected one of the two envelopes with the words "intervention" and "placebo control" that will receive the intervention of the same group.

Blinding (investigator's opinion)

Single blinded

Blinding description

Patients will not know in which group will they be placed because in both groups the kinesiotape will be glued to the same area of the leg and in both groups, the size of the attached tape was the same .the only difference between the two group was that in the kinesiotape group was taped by the Kinesiotape with tension, while the placebo group was taped with Kinesiotape but with-out any tension and patients did not notice any difference in kinesiotaping tension.

Placebo

Used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Ethics committee of Hamedan University of Medical Sciences

Street address

Bu Ali Sina University, Abu Taleb St, Modares Quarter, Hamedan

City

Hamedan

Province

Hamadan

Postal code

3869565178

Approval date

2020-02-25, 1398/12/06

Ethics committee reference number

IR.BASU.REC.1398.046

Health conditions studied**1****Description of health condition studied**

Shin Splint

ICD-10 code**ICD-10 code description****Primary outcomes****1****Description**

Plantar pressure variables

Timepoint

Before the intervention begins, immediately after the end of the intervention, One day after the end of the intervention

Method of measurement

RSscan Device

2**Description**

Balance

Timepoint

Before the intervention begins, immediately after the end of the intervention, One day after the end of the intervention

Method of measurement

Y-Balance Test

3**Description**

Proprioception

Timepoint

Before the intervention begins, immediately after the end of the intervention, One day after the end of the

intervention
Method of measurement
Goniometer

Secondary outcomes

1

Description

Disorder in Plantar pressure Distribution

Timepoint

Before the intervention begins, immediately after the end of the intervention, One day after the end of the intervention

Method of measurement

RSscan Device

2

Description

ImBalance

Timepoint

Before the intervention begins, immediately after the end of the intervention, One day after the end of the intervention

Method of measurement

Y-Balance Test

3

Description

Disorder in Proprioception

Timepoint

Before the intervention begins, immediately after the end of the intervention, One day after the end of the intervention

Method of measurement

Goniometer

Intervention groups

1

Description

Intervention group: kinesio taping group (kinesio tape with violet color ATEX brand made in South Korea) will be applied to the muscles of the tibialis anterior with %50 tension for 24 hours, then plantar pressure, balance and ankle proprioception will be measured before, immediately and one day after the kinesio taping.

Category

Rehabilitation

2

Description

Control group: control placebo group with kinesiotape (kinesio tape with yellow color ATEX brand made in South Korea) intervention as the first intervention group but without tension will be applied to the muscles of the tibialis anterior for 24 hours, then plantar pressure, balance and ankle Proprioception will be measured

before, immediately and one day after the kinesio taping.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

committee of table tennis of Hamedan

Full name of responsible person

Amir Shayesteh

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Bu Ali Sina University

Full name of responsible person

gholam hossein majzoobi

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majzoobi@basu.ac.ir

Grant name

Grant code / Reference number

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

No

Title of funding source

Bu Ali Sina University

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
Bu Ali Sina University
Full name of responsible person
Amir Shayesteh
Position
Student
Latest degree
Bachelor
Other areas of specialty/work
Sport Rehabilitation
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Undecided - It is not yet known if there will be 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