

Clinical Trial Protocol

Iranian Registry of Clinical Trials

04 Jul 2026

The effect of kinesio tape and dynamic tape on range of motion, functional performance and balance in athletes with chronic ankle instability with and without fatigue

Protocol summary

Study aim

Determining the effect of kinesio tape and dynamic tape on the investigated factors in athletes with chronic ankle instability with and without fatigue

Design

Randomized, single-blind clinical trial, Phase II. This study will be conducted on 34 athletes with chronic ankle instability. One of the four interventions is applied in each session. Before starting the work in each session, a lottery is held to select the intervention of that session.

Settings and conduct

This study will be conducted in the sports rehabilitation laboratory of Arak University. Each participant in this study will undergo intervention in four different sessions. At first, the objectives of the study will be explained to the participants in general. But in the evaluation sessions, subjects are blinded regarding the selected intervention.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Suffering from chronic ankle instability, scoring more than 24 from the Cumberland Ankle Instability Tool Questionnaire, not participating in the ankle treatment program at the same time as the study, the absence of severe lower limb injuries, no history of ankle fractures and surgery in Six months leading up to the study, no history of neurological disease, vestibular or visual impairment. Exclusion criteria: not completing the study process, skin sensitivity to tape.

Intervention groups

This study includes one group. On four different days, the participants will be subjected to four interventions including kinesio tape, dynamic type, placebo, and control.

Main outcome variables

The functional performance; balance; joint range of motion; postural sway; gait; Perceived stability; joint position sense

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20200204046368N9**

Registration date: **2023-05-13, 1402/02/23**

Registration timing: **prospective**

Last update: **2023-05-13, 1402/02/23**

Update count: **0**

Registration date

2023-05-13, 1402/02/23

Registrant information

Name

Zahra Raeisi

Name of organization / entity

Arak University

Country

Iran (Islamic Republic of)

Phone

+98 86 3417 3492

Email address

z_raisi13@yahoo.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-05-20, 1402/02/30

Expected recruitment end date

2023-07-06, 1402/04/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of kinesiotope and dynamic tape on range of motion, functional performance and balance in athletes with chronic ankle instability with and without fatigue

Public title

The effect of dynamic type and kinesiotope on chronic ankle instability

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria:

Suffering from chronic ankle instability Score greater than 24 on the Cumberland Instability Instrument Failure to participate in the ankle treatment program at the same time as the study Absence of musculoskeletal disorders and other severe lower limb injuries No history of neurological disease, vestibular or vision disorder No history of ankle fracture and ankle surgery in the six months leading up to the study At least six months have passed since the last ankle sprain injury

Exclusion criteria:

A score of less than 24 on the Cumberland Instability Instrument Participating in the ankle treatment program at the same time as this study Existence of musculoskeletal disorders and other severe lower limb injuries Having a history of neurological disease, vestibular or vision disorder Having a history of ankle fracture or ankle surgery in the six months leading up to the study

Age

From **18 years** old to **30 years** old

Gender

Male

Phase

N/A

Groups that have been masked

- Participant

Sample size

Target sample size: **34**

Randomization (investigator's opinion)

N/A

Randomization description

Blinding (investigator's opinion)

Single blinded

Blinding description

The control, placebo, kinesiotope, and dynamic tape methods will be used in this study, but the participants will not be explained which kind of tape was applied.

Placebo

Used

Assignment

Single

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Research Ethics Committee of Arak University

Street address

Basij square

City

Arak

Province

Markazi

Postal code

3848177584

Approval date

2023-04-19, 1402/01/30

Ethics committee reference number

IR.ARAKU.REC.1402.005

Health conditions studied

1

Description of health condition studied

Chronic ankle instability

ICD-10 code

M25.37

ICD-10 code description

Other instability, ankle and foot

Primary outcomes

1

Description

Functional performance

Timepoint

Before and after fatigue

Method of measurement

functional performance tests: side hop, 6-meter crossover hop, figure-of-eight hop, triple crossover hop, and lateral hop.

2

Description

Balance

Timepoint

Before and after fatigue

Method of measurement

Y balance test

3

Description

Joint range of motion with and without weight bearing

Timepoint

Before and after fatigue

Method of measurement

Goniometer , Weight-bearing lunge test

4

Description

Postural sway

Timepoint

Before and after fatigue

Method of measurement

Pedoscan

Secondary outcomes

1

Description

Perceived stability

Timepoint

Before and after fatigue

Method of measurement

Visual analogue scale questionnaire

2

Description

Gait

Timepoint

Before and after fatigue

Method of measurement

Pedoscan

3

Description

Joint position sense

Timepoint

Before and after fatigue

Method of measurement

Goniometer

Intervention groups

1

Description

Intervention group: The present study has one group. Evaluations are done in four separate sessions. In each session, one of the control, placebo, dynamic tape and Kinesio tape methods is applied to the ankle. Tests are performed before and after the fatigue protocol in each of these situations.

Category

Prevention

Recruitment centers

1

Recruitment center**Name of recruitment center**

Arak university

Full name of responsible person

Zahra Raeisi

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Arak University, Karbala Boulevard, Basij Square

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Sponsors / Funding sources

1

Sponsor**Name of organization / entity**

Arak university

Full name of responsible person

Hamed Safikhani

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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

Arak 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**

Arak University

Full name of responsible person

Zahra Raeisi

Position

Assistant professor

Latest degree

Ph.D.

Other areas of specialty/work

Sport Medicine

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Person responsible for scientific inquiries

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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

Not applicable

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

Not applicable

Data Dictionary

Not applicable