

# 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 kinesio tape 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 kinesio tape 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, kinesio, 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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**Province**

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**Postal code**

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**Phone**

+98 86 3277 4031

**Email**

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### Sponsors / Funding sources

#### 1

**Sponsor****Name of organization / entity**

Arak university

**Full name of responsible person**

Hamed Safikhani

**Street address**

Arak University, Karbala Boulevard, Basij Square

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+98 86 3262 2000

**Email**

d-research@araku.ac.ir

**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

**Street address**

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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