

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

28 Jun 2026

### The effect of quadriceps kinesiio taping on dynamic balance in healthy adults after muscle fatigue

#### Protocol summary

##### Summary

This study is a randomized clinical trial to compare the balance of healthy subjects with and without the use of elastic taping after knee muscle fatigue. Healthy young women (18-30 years) from students and staffs of Isfahan University of Medical Sciences will be recruited. Exclusion criterias are: Musculoskeletal and orthopedic problems, neurologic disorders, lower limb pain, spine and lower limb surgery history, CNS or vestibular balance disorder, Professional athletes, medicine consumption that affect balance, Skin disorder. The sample size is determined based on a pilot study. The subjects were randomly divided into two groups of elastic taping (intervention group) and without taping (control group). Tests will be done in 2 sessions in Musculoskeletal Research Center, School of Rehabilitation Sciences, Isfahan University of Medical Sciences. In first session the access intervals in Y balance test without muscle taping will be recorded. In the second session (1 week later), the dominant quadriceps muscle in intervention group will be taped. Then both group will do warm-up exercise and fatigue protocole and will be tested with Y balance test again. Fatigue protocole is knee extension on quadriceps table from 100 degree to 20 degree knee flexion with Weight of 3 Kg and frequency of 40 movement in minute , until Do not complete one full range of motion.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2015030121281N1**

Registration date: **2017-05-06, 1396/02/16**

Registration timing: **retrospective**

Last update:

Update count: **0**

##### Registration date

2017-05-06, 1396/02/16

##### Registrant information

###### Name

Azam Esfandiari

###### Name of organization / entity

Isfahan University of Medical Sciences

###### Country

Iran (Islamic Republic of)

###### Phone

+98 31 3786 8405

###### Email address

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##### Recruitment status

###### Recruitment complete

##### Funding source

Isfahan University of Medical Sciences

##### Expected recruitment start date

2016-10-31, 1395/08/10

##### Expected recruitment end date

2017-03-10, 1395/12/20

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

The effect of quadriceps kinesiio taping on dynamic balance in healthy adults after muscle fatigue

##### Public title

The effect of quadriceps kinesiio taping on dynamic balance in healthy adults after muscle fatigue

##### Purpose

Treatment

##### Inclusion/Exclusion criteria

Inclusion criteria: healthy young women aged 18-35 years old. Exclusion criteria: musculoskeletal and

orthopedic problems; neurologic disorders; lower limb pain; spine and lower limb surgery history; CNS or vestibular balance disorder; professional athletes; medicine consumption that affect balance; heart, vestibular, vision and breathing disorder; skin diseases; pregnancy; BMI>25.

#### **Age**

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

#### **Gender**

Female

#### **Phase**

N/A

#### **Groups that have been masked**

*No information*

#### **Sample size**

Target sample size: **28**

#### **Randomization (investigator's opinion)**

Randomized

#### **Randomization description**

#### **Blinding (investigator's opinion)**

Single blinded

#### **Blinding description**

#### **Placebo**

Not used

#### **Assignment**

Parallel

#### **Other design features**

### **Secondary Ids**

empty

### **Ethics committees**

#### **1**

##### **Ethics committee**

###### **Name of ethics committee**

Isfahan University of Medical Sciences

###### **Street address**

Isfahan University of Medical Sciences, Hezar Jarib street

###### **City**

Isfahan

###### **Postal code**

73461-81746

##### **Approval date**

2016-10-01, 1395/07/10

##### **Ethics committee reference number**

IR.MUI.REC.1395.3.395519

### **Health conditions studied**

#### **1**

##### **Description of health condition studied**

Balance

##### **ICD-10 code**

M99.8

##### **ICD-10 code description**

Other biomechanical lesions

### **Primary outcomes**

#### **1**

##### **Description**

Balance

##### **Timepoint**

Before and after muscle fatigue

##### **Method of measurement**

Y balance test

### **Secondary outcomes**

empty

### **Intervention groups**

#### **1**

##### **Description**

intervention group : elastic taping (kinesiotaping)

##### **Category**

Prevention

#### **2**

##### **Description**

control group without elastic taping

##### **Category**

N/A

### **Recruitment centers**

#### **1**

##### **Recruitment center**

###### **Name of recruitment center**

Isfahan University of Medical Sciences

###### **Full name of responsible person**

Azam Esfandiari

###### **Street address**

Isfahan University of Medical Sciences , Hezar Jarib street

###### **City**

Isfahan

### **Sponsors / Funding sources**

#### **1**

##### **Sponsor**

###### **Name of organization / entity**

Isfahan University of Medical Sciences, Vice Chancellor for Research and Technology”

###### **Full name of responsible person**

Dr. Zahra Sadat Rezaeian

###### **Street address**

Isfahan University of Medical Sciences, Hezar Jarib St.

###### **City**

Isfahan

##### **Grant name**

##### **Grant code / Reference number**

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

Yes

**Title of funding source**

Isfahan University of Medical Sciences, Vice Chancellor for Research and Technology"

**Proportion provided by this source**

100

**Public or private sector**

*empty*

**Domestic or foreign origin**

*empty*

**Category of foreign source of funding**

*empty*

**Country of origin****Type of organization providing the funding**

*empty*

**Person responsible for general inquiries****Contact****Name of organization / entity**

Isfahan University of Medical Sciences

**Full name of responsible person**

Azam Esfandiari

**Position**

Bachelors degree

**Other areas of specialty/work****Street address**

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**Web page address****Person responsible for scientific inquiries****Contact****Name of organization / entity**

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**Position**

Bachelors degree

**Other areas of specialty/work****Street address**

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**Web page address****Sharing plan****Deidentified Individual Participant Data Set (IPD)**

*empty*

**Study Protocol**

*empty*

**Statistical Analysis Plan**

*empty*

**Informed Consent Form**

*empty*

**Clinical Study Report**

*empty*

**Analytic Code**

*empty*

**Data Dictionary**

*empty*