

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

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Name of organization / entity

Isfahan University of Medical Sciences

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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.

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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

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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