Clinical Trial Protocol
Iranian Registry of Clinical Trials

31 Oct 2026

Comparing the Effect of Kinesiotaping and stretching of Gastrocnemius Muscle on Postural Control of elderly and youth

Protocol summary

Summary

The Aim of this study is comparing the Effect of Kinesiotaping and stretching of Gastrocnemius Muscle on Postural Control of Isfahanian elderly and youth. This is a practical and randomized control trial study. The Elderly aged over the 60 and youth between 18-35 years that can walk with or without assistive devices and have not any cardiopulmonary, neurologic and rheumatologic disorders, will be in this study. Random sampling will be conducted among the elderly living in the community or nursing home and the students of Isfahan rehabilitation school.Participants will be randomly and equally in four experimental groups (elderly kinesiotaping, youth kinesiotaping, elderly stretching and youth stretching). According to similar researches, the sample size will be 80 participants (20 subjects in each group). The Subjects after signing the Informed consent and instructing about the testing procedures, will do the single leg stance test before and after the kinesiotaping or stretching. Center of pressure excursion and velocity will be evaluated by force plate before and after the interventions. Investigator assessment of balance will be unaware of the intervention groups.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016042327554N1**
Registration date: **2016-06-12, 1395/03/23**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2016-06-12, 1395/03/23

Registrant information

Name
Zohreh Shafizadegan
Name of organization / entity
Country
Iran (Islamic Republic of)
Phone
+98 31 3792 5007
Email address
zanbagh625@gmail.com

Recruitment status

Recruitment complete

Funding source

This study is part of a research grant at the Isfahan University of Medical Sciences (code 194082)

Expected recruitment start date

2016-03-19, 1394/12/29

Expected recruitment end date

2018-03-20, 1396/12/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparing the Effect of Kinesiotaping and stretching of Gastrocnemius Muscle on Postural Control of elderly and youth

Public title

The effefct of kinesiotaping and stretching of gastrocnemius muscle on postural control

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria for elderly group: Age over 60;The ability to walk with or without assistive devices , Inclusion criteria for youth group: Age between 18-35 years , Exclusion Criteria For both groups: Severe

cardiovascular and pulmonary disease; neurological disorders; Rheumatological and Orthopedic disorders affecting gait and balance; MMSE<21 ; Skin irritation or ulcers that precludes the use of Kinesiotaping; untreated vision or hearing problems

Age

From **18 years** old to **60 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **80**

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

Ethics committee of Isfahan University of Medical Sciences

Street address

Isfahan University of Medical Sciences, Vice Chancellor for Research and Technology, Hezar Jarib street

City

Isfahan

Postal code

Approval date

2015-08-02, 1394/05/11

Ethics committee reference number

IR.MUI.REC.1394.1.082

Health conditions studied

1

Description of health condition studied

Postural Control

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Static Balance

Timepoint

Before and Immediately After the intervention

Method of measurement

Second , Single Leg Stance Test

2

Description

Center of Pressure velocity

Timepoint

Before and Immediately After the intervention

Method of measurement

mm/s , forceplate

3

Description

Center of Pressure Excursion

Timepoint

Before and Immediately After the intervention

Method of measurement

meter , Forceplate

Secondary outcomes

empty

Intervention groups

1

Description

Intervention (Youth Group): Gastrocnemius Stretching: In this study, the Gastrocnemius muscle will be stretched for 60 seconds by 4 times. The 10-second rest periods will be included.

Category

Rehabilitation

2

Description

Intervention (Youth Group): Gastrocnemius Kinesiotaping : The subject will be prone and a “Y strip” of Kinesiotaping (KT) was applied. Some of the beginning of the tape will be attached on the plantar surface of the foot without any tension. Then the ankle joint will be held in dorsiflexion passively for Gastrocnemius stretching.The Tape will be applied on Achilles tendon with 25% tension. The end points of tape will be just above the popliteal fold without any tension. KT method will be used based on Kinesiotaping international guidelines

Category

Rehabilitation

3

Description
Intervention(Elderly Group): Gastrocnemius Stretching: In this study, the Gastrocnemius muscle will be stretched for 60 seconds by 4 times. The 10-second rest periods will be included.
Category
Rehabilitation

4

Description
Intervention(Elderly Group): Gastrocnemius Kinesiotaping: The subject will be prone and a “Y strip” of Kinesiotaping (KT) was applied. Some of the beginning of the tape will be attached on the plantar surface of the foot without any tension. Then the ankle joint will be held in dorsiflexion passively for Gastrocnemius stretching.The Tape will be applied on Achilles tendon with 25% tension. The end points of tape will be just above the popliteal fold without any tension. KT method will be used based on Kinesiotaping international guidelines
Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
Musculoskeletal Research Center , Isfahan University of Medical sciences
Full name of responsible person
Zohreh Shafizadegan
Street address
Musculoskeletal Research Center, Rehabilitation School, 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.Seyed Mohammad Hashemi
Street address
Building No.4, Isfahan University of Medical Sciences
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
Zohreh Shafizadegan
Position
MSc in Physiotherapy, Member of the Department of Physical Therapy
Other areas of specialty/work
Street address
Rehabilitation School, Hezar Jarib street
City
Isfahan
Postal code
Phone
+98 31 3792 5037
Fax
Email
zanbagh625@gmail.com, zanbagh625@yahoo.com
Web page address

Person responsible for scientific inquiries

Contact
Name of organization / entity
Muscloskletal Research Center, Rehabilitation School, Isfahan University of Medical Sciences
Full name of responsible person
Zohreh Shafizadegan
Position
MSc in physiotherapy
Other areas of specialty/work
Street address
Rehabilitation School, Isfahan University of Medical Sciences, Hezar Jarib street
City
Isfahan
Postal code
Phone
+98 31 3792 5037
Fax
Email
zanbagh625@gmail.com, zanbagh625@yahoo.com

Web page address

Person responsible for updating data

Contact

Name of organization / entity
Muscloskeletal Research Center, Rehabilitation School, Isfahan University of Medical Sciences

Full name of responsible person
Zohreh Shafizadegan

Position
MSc in Physiotherapy, Member of the Department of Physical Therapy

Other areas of specialty/work

Street address
Rehabilitation School, Isfahan University of Medical Sciences, Hezar Jarib street

City
Isfahan

Postal code

Phone
+98 31 3792 5037

Fax

Email
zanbagh 625@gmail.com , zanbagh625@yahoo.com

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