

Clinical Trial Protocol

Iranian Registry of Clinical Trials

25 Jun 2026

Effects of wearing compression versus normal socks on postural stability during sitting-to-standing task performance in people with stroke

Protocol summary

Registration timing: **prospective**

Study aim

The aim of this study is to examine the effect of compression socks on the postural stability in people with stroke.

Last update: **2018-03-23, 1397/01/03**

Update count: **0**

Registration date

2018-03-23, 1397/01/03

Design

The design of this study is double-blind, non-randomised sham controlled clinical trial with parallel groups.

Registrant information

Name

Noureddin Nakhostin Ansari

Name of organization / entity

Tehran University of Medical Sciences, Faculty of Rehabilitation

Settings and conduct

The participants will be selected from stroke survivors who are referred to rehabilitation centres in Tehran University of Medical Science. The design is single-blinded in which only participants will be blinded to the type of intervention and aims.

Country

Iran (Islamic Republic of)

Participants/Inclusion and exclusion criteria

Inclusion criteria: hemiplegia in the right or left side of the body; independency in sit-to-stand; more than 2 months after stroke incident; both genders. Exclusion criteria: unable to sit and stand independently; older than 80 years; poor motor functions according to their score in MAS <24 and TUG >120 sec; poor cognitive function.

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Intervention groups

The participants will be selected non-randomly and will be allocated to intervention and control groups according to clinical measurement results. The intervention group will use compression socks for 2 weeks (3 days per week), whereas the control group use normal socks in the same time period.

Recruitment status

Recruitment complete

Funding source

Main outcome variables

Body sway: the ability to posture within the base of support area

Expected recruitment start date

2018-07-11, 1397/04/20

Expected recruitment end date

2019-07-11, 1398/04/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20100202003259N3**

Registration date: **2018-03-23, 1397/01/03**

Scientific title

Effects of wearing compression versus normal socks on postural stability during sitting-to-standing task performance in people with stroke

Public title

Effects of wearing compression socks on balance of people with stroke

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

People who suffering stroke in left or right side of the body Ability to sit and stand without assistance The onset of stroke is more than 2 months Both males and females

Exclusion criteria:

People with severe disability who cannot sit and stand Age above 80 years Poor motor function in lower limbs that is assessed by TUG and MAS tests Sever cognitive function and poor attention

Age

From **18 years** old to **80 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant
- Outcome assessor

Sample size

Target sample size: **30**

Randomization (investigator's opinion)

Not randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

The assistant therapists who are responsible to collect data are not aware of the type of socks during the intervention period. In addition, participants cannot recognise the type of socks and the outcomes of this study.

Placebo

Used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Iran University of Medical Sciences

Street address

Iran University of Medical Sciences, next to Milad tower, Hemmat highway

City

Tehran

Province

Tehran

Postal code

۱۴۴۹۶۱۴۵۳۵

Approval date

2017-10-08, 1396/07/16

Ethics committee reference number

IR.IUMS.REC 1396.31376

Health conditions studied

1

Description of health condition studied

Stroke

ICD-10 code

G46.4

ICD-10 code description

Cerebellar stroke syndrome

Primary outcomes

1

Description

Body sway:The ability to maintain the posture within base of support area.

Timepoint

Each participant will be tested in 3 conditions: Pre-test, 1 day after the end of the intervention period (post-test) with normal socks and with compression socks.

Method of measurement

Lab test with PT posture scan

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group with compression socks: The intervention group will receive medical compression socks that are customised according to their foot size. The compression socks are standardised in terms of pressure (20-40 mmHg) and texture (nylon 72%; lycra 28%; Finland Zero, Co). They will wear the socks 3 hours per day for 12 days. The instructions for the time and duration and procedure will be given in advance for consistency. They will receive a short message to remind them of the time and duration during the intervention period. In addition, participants record the daily time usage in their diary.

Category

Rehabilitation

2

Description

Control group: Normal socks

Category

Placebo

Recruitment centers1**Recruitment center****Name of recruitment center**

Firozgar Hospital

Full name of responsible person

Bijan Forogh

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Sponsors / Funding sources1**Sponsor****Name of organization / entity**

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Full name of responsible person

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Grant name

Neuromusculoskeletal Research Center

Grant code / Reference number

96-02-217-31376

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

Yes

Title of funding source

Iran University of Medical Sciences

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**

Iran University of Medical Sciences

Full name of responsible person

Bijan Forogh

Position

Professor

Latest degree

Specialist

Other areas of specialty/work

Physical Medicine

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

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Person responsible for updating data

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Latest degree

Specialist

Other areas of specialty/work

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

No - There is not a plan to make this available

Data Dictionary

No - There is not a plan to make this available

Title and more details about the data/document

The data of this study is not shared with others and only findings are disseminated as a scientific report.

When the data will become available and for how long

The data of this study is not shared with others and only findings are disseminated as a scientific report.

To whom data/document is available

The data of this study is not shared with others and only findings are disseminated as a scientific report.

Under which criteria data/document could be used

The data of this study is not shared with others and only findings are disseminated as a scientific report.

From where data/document is obtainable

The data of this study is not shared with others and only findings are disseminated as a scientific report.

What processes are involved for a request to access data/document

The data of this study is not shared with others and only findings are disseminated as a scientific report.

Comments