

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jun 2026

A comparative study to assess the effect of balance training with and without taping on mobility and balance in stroke patients

Protocol summary

Study aim

1.To assess the effect of taping with balance training on mobility and balance in participants with stroke. 2.To assess the effect of balance training on mobility and balance in participants with stroke. 3.To compare effect of taping with and without using balance training on mobility and balance in participants with stroke.

Design

Randomized Control Trial (RCT) Single blind study.

Settings and conduct

Pakistan Institute of Medical Sciences Islamabad.
Physiotherapy department.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Participants of both genders with age more than 35 year will be enrolled. Participants those with hemiparesis with onset more than three months of stroke onset and less than one and a half year. A score of 24 or higher on the MMSE, those who can walk more than 10 m independently with or without a walking aid. Those who are having spastic paralysis of lower limb, those who understand the purpose of the study and provided written consent form. Exclusion Criteria: Participant those with a history of surgery on the lower extremities. High skin sensitivity or skin diseases. Those who complained of pain during dorsiflexion of the ankle joint, and those with a modified Ashworth Scale >2.

Intervention groups

There are two interventional group 1. Experimental group (A) Balance training with taping group and 2) Control group (B) Balance training without taping group.

Main outcome variables

Ten meter walk test, Berg Balance Scale, Timed up and go test, Six Minute Walk Test, Self structured Questionnaire

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20211022052835N7**

Registration date: **2023-05-03, 1402/02/13**

Registration timing: **prospective**

Last update: **2023-05-03, 1402/02/13**

Update count: **0**

Registration date

2023-05-03, 1402/02/13

Registrant information

Name

Fouzia Batool

Name of organization / entity

Shifa Tameer-e-Millat University

Country

Pakistan

Phone

+92 51 8441752

Email address

fouzia_dpt.ahs@stmu.edu.pk

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-05-08, 1402/02/18

Expected recruitment end date

2023-06-20, 1402/03/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

A comparative study to assess the effect of balance training with and without taping on mobility and balance in stroke patients

Public title

A comparative study to assess the effect of balance training with and without taping on mobility and balance in stroke patients

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Participants of both genders with age more than 35 year will be enrolled. Participants those with hemiparesis with onset more than three months of stroke onset and less than one and a half year. A score of 24 or higher on the MMSE, those who can walk more than 10 m independently with or without a walking aid. Those who are having spastic paralysis of lower limb, those who understand the purpose of the study and provided written consent form.

Exclusion criteria:

Participant those with a history of surgery on the lower extremities. High skin sensitivity or skin diseases. Those who complained of pain during dorsiflexion of the ankle joint, and those with a modified Ashworth Scale >2.

Age

From **35 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Investigator

Sample size

Target sample size: **36**

Randomization (investigator's opinion)

Randomized

Randomization description

In this study simple random sampling technique is used by sealed envelop method by using a computerized random number generator. The sequence of random allocation is done by an individual who has not directly involved in the study. Random numbers is written on index cards and placed in thick and opaque sealed envelopes before the study. After taking consent from the participants for their participation in the study, the therapist opens the envelop and give the respective protocol to the individual. The study is single blinded as participants is not aware of the intervention group they are placed in. Participants will be placed either in to the experimental group 1 (Balance training with taping) or control group 2 (Balance training without taping) keeping the process completely randomized ,sealed envelope method will be used.

Blinding (investigator's opinion)

Single blinded

Blinding description

Prior to collecting data, participants would be informed about both the treatment techniques used in both groups; experimental group A (Balance training with taping) and control group B (Balance training without taping). Further they are informed that you will get one of these treatment depending upon the group written on

the card inside the envelop you choose. The group A or B belongs to which way of treatment is known to therapist but the patient doesn't know about it.

Placebo

Not used

Assignment

Parallel

Other design features

N/A

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Institutional review board and ethical committee and ethical committee of shifa tameer-e-millat univ

Street address

Pitras Bukhari Road, Shifa international hospital Ltd. sector h-8/4 Islamabad

City

Islamabad

Postal code

44000

Approval date

2023-04-04, 1402/01/15

Ethics committee reference number

IRB#018-23

Health conditions studied

1

Description of health condition studied

Hemiparesis

ICD-10 code

G46

ICD-10 code description

G46

Primary outcomes

1

Description

Balance

Timepoint

Pre intervention at 0-week, and Post Intervention data after 4 weeks will be taken.

Method of measurement

Ten meter walk test, Berg Balance Scale, Timed up and go test, Six Minute Walk Test

2

Description

- Mobility

Timepoint

Pre intervention at 0-week, and Post Intervention data after 4 weeks will be taken.

Method of measurement

Ten meter walk test, Berg Balance Scale, Timed up and go test, Six Minute Walk Test

Secondary outcomes

1

Description

To compare the effect of balance training with and without taping on mobility and balance in stroke patients.

Timepoint

Pre Intervention at 0 week, and Post Intervention data after 4 weeks will be taken.

Method of measurement

Ten meter walk test, Berg Balance Scale, Timed up and go test, Six Minute Walk Test

Intervention groups

1

Description

Intervention Group A: Group A would receive Balance training with taping. There would be 3 sessions per week for 4 weeks. Session would be comprised of 20 minutes with 5 minutes of warm and 5 minutes of cool down before and after the session. Experimental group (taping group), for taping with balance training, kinesio tape will be used for ankle taping. Kinesio tape is used to stabilize the ankle joint during static standing or walking in stroke patients. In this study, the tape will be attached to the peroneus tertius, peroneus longus, tibialis anterior, and extensor hallucis longus, which are used widely for ankle joint stability in stroke patients. With kinesio tape attached to the four muscles, each participant will be given balance training for 20 minutes. Balance training plan: (1) 5 minutes warm-up, (2) 10 minutes static balance exercises, such as Squats (two leg stance), One leg stance, (3) 10 minutes dynamic balance exercises, such as Jogging end to end, Sideways walking or running with crossovers, Forward walking or running in a zigzag line, Backward walking or running in a zigzag line, and (4) 5 minutes of cool-down.

Category

Rehabilitation

2

Description

Intervention Group B: Group B would receive Balance training without taping. There would be 3 sessions per week for 4 weeks. Session would be comprised of 20 minutes with 5 minutes of warm and 5 minutes of cool down before and after the session. Balance training plan: (1) 5 minutes warm-up, (2) 10 minutes static balance exercises, such as Squats (two leg stance), One leg stance, (3) 10 minutes dynamic balance exercises, such

as Jogging end to end, Sideways walking or running with crossovers, Forward walking or running in a zigzag line, Backward walking or running in a zigzag line, and (4) 5 minutes of cool-down. These are traditional balance exercise. The treatment duration for the control group will be 20 minutes/3 times a week for 4 weeks.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Pakistan Institute of Medical Sciences

Full name of responsible person

Dr. Amina Farid Khan

Street address

Ibn-e-Sina Rd, G 8/3, G-8, Islamabad

City

Islamabad

Postal code

44000

Phone

+92 306 5007123

Email

khan.amina0166@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shifa Tameer-e-Millat University

Full name of responsible person

Fouzia Batool

Street address

Pitras Bukhari Road, Shifa Tameer-e-Millat University, H-8/4, Islamabad

City

Islamabad

Postal code

44000

Phone

+92 51 8441752

Email

fouzia_dpt.ahs@stmu.edu.pk

Web page address

<https://stmu.edu.pk/>

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Shifa Tameer-e-Millat University

Proportion provided by this source

100

Public or private sector

Private

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**

Shifa Tameer-e-Millat University

Full name of responsible person

Fouzia Batool

Position

Assistant Professor

Latest degree

Master

Other areas of specialty/work

Physiotherapy

Street address

Pitras Bukhari Road, Shifa Tameer-e-Millat University,
H-8/4, Islamabad

City

Islamabad

Province

Islamabad

Postal code

44000

Phone

+92 332 7120385

Email

fouzia_dpt.ahs@stmu.edu.pk

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

Shifa Tameer-e-Millat University

Full name of responsible person

Fouzia Batool

Position

Assistant Professor

Latest degree

Master

Other areas of specialty/work

Physiotherapy

Street address

Pitras Bukhari Road, Shifa Tameer-e-Millat University,
H-8/4, Islamabad

City

Islamabad

Province

Islamabad

Postal code

44000

Phone

+92 332 7120385

Email

fouzia_dpt.ahs@stmu.edu.pk

Person responsible for updating data**Contact****Name of organization / entity**

Shifa Tameer-e-Millat University

Full name of responsible person

Fouzia Batool

Position

Assistant Professor

Latest degree

Master

Other areas of specialty/work

Physiotherapy

Street address

Pitras Bukhari Road, Shifa Tameer-e-Millat University,
H-8/4, Islamabad

City

Islamabad

Province

Islamabad

Postal code

44000

Phone

+92 332 7120385

Email

fouzia_dpt.ahs@stmu.edu.pk

Sharing plan**Deidentified Individual Participant Data Set (IPD)**

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

There is no further information

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

No - There is not 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

There is no such plan

When the data will become available and for how long

There is no such plan

To whom data/document is available

There is no such plan

Under which criteria data/document could be used

There is no such plan

From where data/document is obtainable

There is no such plan

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

There is no such plan

Comments