Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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

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+92 51 8441752

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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 envelops 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
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
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Full name of responsible person
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Web page address
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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
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Person responsible for updating data

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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