Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

EFFECT OF PROPRIOCEPTIVE NEUROMUSCULAR FACILITATION PATTERNS TO IMPROVE GAIT AND BALANCE IN ACUTE SUB-ACUTE AND CHRONIC HEMIPLEGIC STROKE PATIENTS

Protocol summary

Study aim
Study aims to evaluate the Effect of Proprioceptive Neuromuscular Facilitation Patterns to Improve Gait and Balance in Acute, Sub-acute and Chronic Hemiplegic stroke Patients.

Design
Interventional quantitative study

Settings and conduct
Al-khidmat hospital Tehseen hospital sheikh zayed hospital

Participants/Inclusion and exclusion criteria
Inclusion criteria: Age 55-70 years. Both genders (male and female). Patients with diagnosis of hemorrhagic and ischemic stroke. Patients (with minimum support) were able to walk 10 meter Exclusion Criteria • Patient with preexisting medical conditions like cardiac disease (coronary or peripheral artery disease, cardiomyopathy) respiratory disease(asthma, pneumonia and lung cancer etc.) neurological condition (epilepsy, headache, seizures, spinal cord injury) or orthopedic diagnosis (OA, RA, CTS etc.) that could interfere training protocol • Patient who are unable to do training program. • Patients who are involved in any kind of other physical therapy or medical treatment.

Intervention groups
Treatment group received rhythmic initiation, treadmill with thera band and PNF Active control group recieved rhythmic initiation, treadmill with thera band

Main outcome variables
Time Up and Go test Performance-Oriented Mobility Assessment

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20210827052300N1**
Registration date: **2021-10-22, 1400/07/30**
Registration timing: **retrospective**

Last update: **2021-10-22, 1400/07/30**
Update count: **0**

Registration date
2021-10-22, 1400/07/30

Registrant information

Name
Arwa Tahir

Name of organization / entity
The University Of Faisalabad

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Pakistan

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2021-05-19, 1400/02/29

Expected recruitment end date
2021-07-07, 1400/04/16

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
EFFECT OF PROPRIOCEPTIVE NEUROMUSCULAR FACILITATION PATTERNS TO IMPROVE GAIT AND

BALANCE IN ACUTE SUB-ACUTE AND CHRONIC HEMIPLEGIC STROKE PATIENTS

Public title

EFFECT OF PROPRIOCEPTIVE NEUROMUSCULAR FACILITATION PATTERNS TO IMPROVE GAIT AND BALANCE IN ACUTE, SUB-ACUTE AND CHRONIC HEMIPLEGIC STROKE PATIENTS

Purpose

Health service research

Inclusion/Exclusion criteria

Inclusion criteria:

 Age 55-70 years. Both genders (male and female). Patients with diagnosis of hemorrhagic and ischemic stroke. Patients were able to walk 10 meter (with minimum support) (Kim and Kim,2018) . Patients with acute, sub acute and chronic hemiplegic stroke. Patients who are willing to participate.

Exclusion criteria:

 Patient with preexisting medical conditions like cardiac disease (coronary or peripheral artery disease, cardiomyopathy) respiratory disease(asthma, pneumonia and lung cancer etc.) neurological condition (epilepsy, headache, seizures, spinal cord injury) or orthopedic diagnosis (OA, RA, CTS etc.) that could interfere training protocol (Veneri, 2011). Patient who are unable to do training program. Patients who are involved in any kind of other physical therapy or medical treatment.

Age

From **55 years** old to **70 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Investigator

Sample size

Target sample size: **30**

Randomization (investigator's opinion)

Randomized

Randomization description

Lottery method were used. names of the participants were written on piece of paper and put them in a box and chosen randomly for both groups.

Blinding (investigator's opinion)

Single blinded

Blinding description

Single blinded study. only the investigator knows the control or treatment group others were unaware.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethical and technical committee of the university of faisalabad

Street address

Sargodha road faisalabad

City

Faisalabad

Postal code

38000

Approval date

2021-05-15, 1400/02/25

Ethics committee reference number

TUF/DR/MSPP/304

Health conditions studied

1

Description of health condition studied

Stroke of all of 3 stages acute subacute and chronic due to ischemia and hemorrhage

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Time up and go test and Performance oriented mobility assessment scale

Timepoint

at baseline , at 12 session and at the end of treatment session

Method of measurement

For time up and go test stopwatch and chair was required and for poma scale instructions follwed according to their mention points

Secondary outcomes

empty

Intervention groups

1

Description

Control group, received only treadmill training with thera band and rythmic initiation were performed as warm up and cool down

Category

Rehabilitation

2

Description

Intervention group: rythmic initiation were performed as warm up and cool down, treadmill training with thera band and proprioceptive neuromuscular facilitation was performed.

Category
Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center
Sheikh zayed hospital

Full name of responsible person
Head of department Dr usman yousaf, Dr fouzia nwaz

Street address
Hospital road SZH

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Rahim yar khan

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2

Recruitment center

Name of recruitment center
Al khidmadt medical complex

Full name of responsible person
Dr usman yousaf

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Https://g.co/kgs/SR41Be

3

Recruitment center

Name of recruitment center
Tehseen hospital

Full name of responsible person
Dr Ghulam tehseen

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Wireless pull

City
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Https://m.facebook.com/pages/Tehseen-Hospital-Rahim-Yar-Khan/162450107644926

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
The University of Faisalabad

Full name of responsible person
Head of department and supervisor Dr marium zafar

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Sargodha road

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Grant name
head of department

Grant code / Reference number

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

Title of funding source
The University of Faisalabad

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
The University of Faisalabad

Full name of responsible person
Arwa Tahir

Position
Student

Latest degree
Bachelor

Other areas of specialty/work
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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
the data of the patients can not be shared as mentioned in consent form
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
Yes - There is a plan to make this available
Clinical Study Report
Yes - There is a plan to make this available
Analytic Code
Not applicable
Data Dictionary
Not applicable
Title and more details about the data/document
only the data related to measuring outcome would be shared no personal information will be shared
When the data will become available and for how long
2022
To whom data/document is available
everyone related to our field
Under which criteria data/document could be used
only email id
From where data/document is obtainable
from email
What processes are involved for a request to access data/document
email id
Comments
no comments