

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 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 received 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

Country

Pakistan

Phone

+92 68 5878962

Email address

dpt-fa14-030@tuf.edu.pk

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 followed 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: rhythmic initiation were performed as warm up and cool down, treadmill training with therapy 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

City

Rahim yar khan

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64200

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Email

Info@szmc.edu.pk

Web page address

Http://www.szmc.edu.pk/

2

Recruitment center

Name of recruitment center

Al khidmadt medical complex

Full name of responsible person

Dr usman yousaf

Street address

Trust colony

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Rahim yar khan

Postal code

64200

Phone

+92 68 5877084

Email

Akfmcryk@gmail.com

Web page address

Https://g.co/kgs/SR41Be

3

Recruitment center

Name of recruitment center

Tehseen hospital

Full name of responsible person

Dr Ghulam tehseen

Street address

Wireless pull

City

Rahim yar khan

Postal code

64200

Phone

+92 68 5881813

Email

Uzairtahseen1@gmail.com

Web page address

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

Street address

Sargodha road

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Dpt-fa14-030@tuf.edu.pk

Web page address

https://tuf.edu.pk/

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

Physiotherapy

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Arwa Tahir

Position

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Other areas of specialty/work

Physiotherapy

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The University of Faisalabad

Full name of responsible person

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Position

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Latest degree

Bachelor

Other areas of specialty/work

Physiotherapy

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Fax

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Email

Dpt-fa14-030@tuf.edu.pk

Web page address<https://tuf.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

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