

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Effects of Progressive Resistance Training versus Task-specific Training for lower extremity function for Ischemic stroke patients

Protocol summary

Study aim

The comparative effects of progressive resistance exercise and task-specific training in Ischemic stroke patients.

Design

Randomized control trial with participants divided into two group progressive resistance exercises and task specific training with 52 sample size.

Settings and conduct

Trial is conducted in the University of Lahore Teaching Hospital with assessor is blinded and physiotherapist is not blinded

Participants/Inclusion and exclusion criteria

Inclusion Criteria: • Both male and female • Age between 40 and 70 years • First event of ischemic stroke • A Mini-Mental Status Examination score more than and equal to 24 • No facial palsy and receptive aphasia • No prior thoracic or abdominal surgery • Subjects able to sit for 30 secs without using upper extremities for support • Stable patients Exclusion Criteria: • Other disorders such as blindness, deafness, amputation of lower or upper limb, cerebellar stroke • Impaired cognition or other severe medical condition • Patients with abdominal aortic aneurysms; unstable chronic disease; life-incapacitating cardiac disease, severe balance impairment; psychiatric illness. • Musculoskeletal problems in the pelvis or spine • Sensory involvement

Intervention groups

Both groups will receive interventions for 12 weeks, 2 times/week with routine physical therapy for 20 mins before every session. The first intervention group received Progressive Resistance Training for 12 weeks with increased repetitions after every two weeks. The second intervention group received Task Specific Training for 12 weeks with different task after every two weeks

Main outcome variables

Reflex activity, Volitional Movement Within Synergies, Volitional Movement Mixing Synergies, Volitional

Movement With little or no Synergies, Normal Reflex Activity, Coordination/speed, Sensation, Passive joint motion, Joint Pain

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20240609062063N1**

Registration date: **2024-10-29, 1403/08/08**

Registration timing: **retrospective**

Last update: **2024-10-29, 1403/08/08**

Update count: **0**

Registration date

2024-10-29, 1403/08/08

Registrant information

Name

Wajheeha Khan

Name of organization / entity

The University Of Lahore

Country

Pakistan

Phone

+92 335 6166147

Email address

wajheehakhan23@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-12-12, 1402/09/21

Expected recruitment end date

2024-07-10, 1403/04/20

Actual recruitment start date

2024-01-10, 1402/10/20

Actual recruitment end date

2024-09-16, 1403/06/26

Trial completion date

empty

Scientific title

Effects of Progressive Resistance Training versus Task-specific Training for lower extremity function for Ischemic stroke patients

Public title

Effects of Progressive Resistance Training versus Task-specific Training for lower extremity function for Ischemic stroke patients

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Both male and female Age between 40 and 70 years First event of ischemic stroke A Mini- Mental Status Examination score more than and equal to 24 No facial palsy and receptive aphasia No prior thoracic or abdominal surgery Subjects able to sit for 30 secs without using upper extremities for support Stable patients

Exclusion criteria:

Other disorders such as blindness, deafness, amputation of lower or upper limb, cerebellar stroke Not able to cooperate in FMA testing due to impaired cognition or other severe medical condition Patients with abdominal aortic aneurysms; unstable chronic disease; life-incapacitating cardiac disease, severe balance impairment; psychiatric illness. Musculoskeletal problems in the pelvis or spine Sensory involvement

Age

From **40 years** old to **70 years** old

Gender

Both

Phase

3

Groups that have been masked

- Participant

Sample size

Target sample size: **62**

Actual sample size reached: **52**

Randomization (investigator's opinion)

Randomized

Randomization description

Coin Toss method

Blinding (investigator's opinion)

Single blinded

Blinding description

All the participants will be blinded to reduce biases in the study. Because of the nature of the intervention, there will be no blinding of the physical therapist following randomization

Placebo

Not used

Assignment

Crossover

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Research Ethics Committee Faculty of Allied Health Sciences The university of Lahore

Street address

Multan Cantt

City

Multan

Postal code

60000

Approval date

2023-12-12, 1402/09/21

Ethics committee reference number

REC-UOL-650-01-2024

Health conditions studied**1****Description of health condition studied**

Ischemic Stroke

ICD-10 code

G81.0

ICD-10 code description

Flaccid hemiplegia

Primary outcomes**1****Description**

Lower Extremity Function, coordination, sensations, joint pain, passive joint motion

Timepoint

Before Intervention, 6th week after intervention, 12th week after intervention

Method of measurement

Fugel Myer Assessment Scale

Secondary outcomes

empty

Intervention groups**1****Description**

Intervention group: Progressive Resistance Training for 12 weeks with increased repetitions after every two weeks

Category

Rehabilitation

2

Description

Intervention group: Task Specific Training for 12 weeks with different task after every two weeks

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

The University of Lahore Teaching Hospital

Full name of responsible person

Dr Wardah

Street address

Multan Cantt

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Phone

+92 313 6166047

Email

wajheehakhan23@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

The University of Lahore

Full name of responsible person

Dr Samia

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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

The University of Lahore

Proportion provided by this source

40

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 Lahore

Full name of responsible person

Dr Asim Arif

Position

Associate Professor

Latest degree

Ph.D.

Other areas of specialty/work

Orthopedics

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Person responsible for scientific inquiries

Contact

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Latest degree

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Person responsible for updating data

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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

Yes - There is a plan to make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to make this available

Analytic Code

Yes - There is a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available

Title and more details about the data/document

Effects of Progressive Resistance Training versus Task-specific Training for lower extremity function for Ischemic stroke patients

When the data will become available and for how long

starting in January 2024

To whom data/document is available

This only available for people working in academic institutions or people working in businesses can also apply to receive it.

Under which criteria data/document could be used

For information purposes

From where data/document is obtainable

Wajheehakhan23@gmail.com

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

Request for access to data and also mention the purpose for which the data is required by the applicant.

Comments