

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Comparison of Mirror Therapy and Motor Relearning program in improving the motor function of patients with stroke.

Protocol summary

Study aim

To compare the effectiveness of mirror therapy and motor relearning program in stroke. This study will compare the effects of both techniques on the motor function after stroke. The document which states that mirror therapy has therapeutic effect is. Jan, Shafqatullah, et al. "A randomized control trial comparing the effects of motor relearning program and mirror therapy for improving upper limb motor functions in stroke patients." JPMA 69.1242 (2019).

Design

Randomised control trial with blinded outcome assessment. Randomisation was computerised with concealed allocation sequence carried out at an external site.

Settings and conduct

The study will be conducted in the Sheikh Zayed Hospital and Al Noor Hospital of Rahim Yar Khan city. The outcome assessor will be blind.

Participants/Inclusion and exclusion criteria

Inclusion Criteria Age between 40 to 65 years, both ischemic and hemorrhagic stroke, both male and female will be included, Must have intact/unaffected extremity
Exclusion Criteria Patients who are not medically stable, Patients who have dementia, Other musculoskeletal, vascular related conditions, impaired cognitive functions, Rare cardiac diseases, Progressive Neurological disorder, Orthopedic disorder involving any joint of limbs

Intervention groups

Group A. Motor relearning program (Experimental Group)
Group B. Mirror therapy (Control Group)

Main outcome variables

Motor function of upper and lower limb (Fugl Meyer assessment scale)

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20200316046791N1**

Registration date: **2020-04-01, 1399/01/13**

Registration timing: **prospective**

Last update: **2020-04-01, 1399/01/13**

Update count: **0**

Registration date

2020-04-01, 1399/01/13

Registrant information

Name

Rabia Rauf

Name of organization / entity

Isra University

Country

Pakistan

Phone

+92 68 5886995

Email address

rabiaauf00@hotmail.com

Recruitment status

Not yet recruiting

Funding source

Expected recruitment start date

2641-04-20, 2020/01/31

Expected recruitment end date

2641-10-06, 2020/07/14

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of Mirror Therapy and Motor Relearning program in improving the motor function of patients with stroke.

Public title

Comparison of Mirror Therapy and Motor Relearning program in stroke.

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Age between 40 to 65 years Both ischemic and hemorrhagic stroke Both male and female will be included Must have intact/unaffected extremity

Exclusion criteria:

Patients who are not medically stable Patients who have dementia Other musculoskeletal, vascular related conditions, impaired cognitive functions. Rare cardiac diseases Progressive Neurological disorder Orthopedic disorder involving any joint of limbs

Age

From **40 years** old to **65 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Outcome assessor

Sample size

Target sample size: **30**

Randomization (investigator's opinion)

Randomized

Randomization description

The subjects fulfilling the inclusion criteria will be enrolled .For the purpose of randomisation first adequate generation of the allocation sequence and then Concealment of the allocation sequence will be done until assignment occurs.The allocation sequence will be concealed from the researcher enrolling and assessing participants in sequentially numbered, opaque, sealed and stapled envelopes. Aluminum foil inside the envelope will be used to render the envelope impermeable to intense light. To prevent subversion of the allocation sequence, the name and date of birth of the participant will be written on the envelope and a video tape made of the sealed envelope with participant details visible. Carbon paper inside the envelope transferred the information onto the allocation card inside the envelope and a second researcher (outcome assessor) later view video tapes to ensure envelopes were still sealed when participants' names were written on them. Corresponding envelopes will be opened only after the enrolled participants completed all baseline assessments and it will be time to allocate the intervention."

Blinding (investigator's opinion)

Single blinded

Blinding description

It will be single blind and assessor will be blind .All assessments before and after the intervention will be performed by Independent assessor and only eligible subjects will be enrolled . Motor function, joint ROM, balance will be measured. Then subjects will be kept confidential and only it will be given after the assessor

has completed an assessment at baseline , after 03 weeks and 06weeks

Placebo

Not used

Assignment

Other

Other design features**Secondary Ids**

empty

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

Advance Studies and Research Committee(ASRC)

Street address

Farash town near sultana foundation lehtrar road islamabad

City

Islamabad

Postal code

45710

Approval date

2641-04-18, 2020/01/29

Ethics committee reference number

I/IUIC-IIRS/ASRC-055/2020

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

Stroke

ICD-10 code

I63.9

ICD-10 code description

Cerebral infarction, unspecified

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

Motor function

Timepoint

on baseline ,then after 3 weeks and then after 6 weeks

Method of measurement

Motor Part of Fugl meyer assessment scale of Upper and Lower extremity

Secondary outcomes

empty

Intervention groups

1

Description

Treatment Group :Motor Relearning Program:5 sessions a week for 6 weeks.Duration of session will be 40 minutes.(In this intervention emphasis is placed on; utilizing theories of learning and knowledge of bio mechanics for analyzing movements and performance of task.It is based on the assumption that the impaired learning the same way as the unimpaired. Program is based on four factors 1.Elimination of unnecessary muscle activity 2.Feedback 3.Practice 4.Link between postural adjustment and movement,Improve sitting down and standing up,Balance standing: 5.Gait 6.Spasticity 7.Sensory problems)

Category

Rehabilitation

2

Description

Control Group:Mirror Therapy:5 sessions a week for 6 weeks.Duration of session will be 40 minutes.(For mirror therapy the size of mirror will be 35 x 25 inches.Basic motor exercises according to the available function of the patient.Functional tasks or exercises will be performed.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Shaikh Zayed Hospital Rahim Yar Khan

Full name of responsible person

Aqib Rao

Street address

Hospital road Rahim Yar Khan

City

Rahim Yar Khan

Postal code

64200

Phone

+92 68 5886995

Email

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2

Recruitment center

Name of recruitment center

Al Noor Hospital.

Full name of responsible person

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64200

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Isra University

Full name of responsible person

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Grant name

Student

Grant code / Reference number

NA

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

No

Title of funding source

Academic support only

Proportion provided by this source

20

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

Royal College of physiotherapy

Full name of responsible person

Rabia Rauf

Position

Physiotherapist

Latest degree

Bachelor

Other areas of specialty/work

Physiotherapy

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Person responsible for scientific inquiries

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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

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

Statistical Analysis Plan

Not applicable

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

Undecided - It is not yet known if there will be 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

Comparison of mirror therapy and motor relearning program in stroke.

When the data will become available and for how long

It will be available after study completion

To whom data/document is available

To researchers for study only. Patient data will not be shown .

Under which criteria data/document could be used

To researchers for study only. Patient data will not be shown .

From where data/document is obtainable

From the University office and Responsible supervisor and from journal we will process in future

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

It will be only used in confidential way for improving research and benefit of humanity

Comments

It will be first study of such type in Pakistan involving the Upper and Lower limb for comparing the effects of mirror therapy and motor relearning program in stroke.