

Clinical Trial Protocol

Iranian Registry of Clinical Trials

11 Sep 2026

Combined effect of Task specific training and Rood's approach to improve motor and sensory arm function in patients with stroke.

Protocol summary

Study aim

To check the combined effect of Task Specific training and Roods approach in improvement of arm sensory and motor function in patients after stroke. To check the combined effect of Task Specific training and Roods approach in improvement of arm spasticity in patients after stroke

Design

Community based, parallel group, single blind, randomized controlled trial.

Settings and conduct

Settings of the trial are Allied hospital Faisalabad and DHQ hospital Faisalabad. Participants will be blind in the study because treatment will be provided individually and alone. Participants will not know which group they belong to because treatment will be performed by the therapist and will not be explained in detail to the patients.

Participants/Inclusion and exclusion criteria

Inclusion criteria: • Age between 45-65 years. • Acute <6 months upper extremity paresis after stroke. • Muscle power 0-3 muscle grade of all muscle of upper limb by MMT according to oxford scale • Time since stroke < 6months. • Sufficient cognitive ability to participate. • Both genders • Before stroke they were able to wash their hands and feed themselves. • Had no premorbid severe arm condition before stroke Exclusion criteria: • Uncontrolled Hypertension. • Severe dysphasia. • Occipital/ cerebellar lesion. • Other neurological, neuromuscular or orthopedic lesion. • Severe comorbidity. • Concurrent participation in other upper extremity stroke treatment • Perceptual, apraxic or major cognitive defects. • Arm contracture • Severe arm dysfunction before stroke

Intervention groups

Group A will receive common treatment and Rood's treatment approach. Group B will be subjected to task specific training along with common treatment. Group C will receive combination of both Rood's approach and

Task specific training along with common treatment.

Main outcome variables

Motor and sensory function of arm

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20210814052177N1**

Registration date: **2021-09-16, 1400/06/25**

Registration timing: **retrospective**

Last update: **2021-09-16, 1400/06/25**

Update count: **0**

Registration date

2021-09-16, 1400/06/25

Registrant information

Name

Maham Saleem

Name of organization / entity

The University of Faisalabad

Country

Pakistan

Phone

+92 41 2644442

Email address

dpt-fa14-037@tuf.edu.pk

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-05-26, 1400/03/05

Expected recruitment end date

2021-08-28, 1400/06/06

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Combined effect of Task specific training and Rood's approach to improve motor and sensory arm function in patients with stroke.

Public title

Effect of task specific training & Rood's approach on stroke patients.

Purpose

Health service research

Inclusion/Exclusion criteria**Inclusion criteria:**

Age between 45-65 Acute <6 months upper extremity paresis after stroke. Muscle power 0-3 muscle grade of all muscle of upper limb by MMT according to oxford scale Time since stroke < 6months. Sufficient cognitive ability to participate Both genders Before stroke they were able to wash their hands and feed themselves. Had no premorbid severe arm condition before stroke

Exclusion criteria:

Uncontrolled Hypertension. Severe dysphasia Occipital/ cerebellar lesion Other neurological, neuromuscular or orthopedic lesion. Concurrent participation in other upper extremity stroke treatment Perceptual, apraxic or major cognitive defects. Arm contracture Severe comorbidity.

Age

From **45 years** old to **65 years** old

Gender

Both

Phase

3

Groups that have been masked

- Participant

Sample size

Target sample size: **45**

Randomization (investigator's opinion)

Randomized

Randomization description

Non probability purposive sampling technique will be done on the patients on individual basis. Simple randomization will be done and patients will be allocated to three different groups by lottery method with sealed envelopes and identical slips of paper.

Blinding (investigator's opinion)

Single blinded

Blinding description

Participants will be blind in the study because treatment will be provided individually and alone. Participants will not know which group they belong to because treatment will be performed by the therapist and will not be explained in detail to the patients. Both techniques will be performed manually and patient will be unaware of the treatment techniques. As both are manual techniques performance of these intervention will be made similar to patients.

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

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

Ethics committee of The University of Faisalabad

Street address

P720 neelam street green view colony Faisalabad

City

Faisalabad

Postal code

38000

Approval date

2021-05-25, 1400/03/04

Ethics committee reference number

TUF/DR/MSPP/305

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

Sensory and motor function of arm in Stroke patients

ICD-10 code

I63

ICD-10 code description

Cerebral infarction

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

Sensory function of arm

Timepoint

Before intervention and after six week of intervention.

Method of measurement

Fugl meyer assessment scale

2**Description**

Motor function of arm

Timepoint

Before intervention and after six week of intervention.

Method of measurement

Fugl meyer assessment scale

Secondary outcomes

1

Description

Spasticity of arm muscle.

Timepoint

Before intervention and after six week of intervention

Method of measurement

Modified ashworth scale

Intervention groups

1

Description

Intervention group: Intervention group 1 will receive common treatment and Rood's treatment approach for three times a week on alternate days, for six weeks. Rood's approach include: Tapping (over the arm muscle to be facilitated, 3-5 times per repetition, 10 repetitions per day, 3days/ week) • Icing (3-5 sec/ repetition, 10 repetitions/day, 3days/week). • Fast brushing (Apply for 3 to 5seconds & repeated after 30 sec, 10 repetitions/day). • Light touch (3-5 strokes/repetition, 30 sec rest period between strokes, 10 repetitions/day). • Heavy joint compression (Joint Compression >body wt. applied through the longitudinal axis of the bone.)

Category

Rehabilitation

2

Description

Intervention group: Intervention group 2 will be subjected to task specific training along with common treatment for 45 minutes, three times a week for six weeks. Task specific training involve 20-30 trials of each activity. Touch a wall at shoulder level • Touch his cheeks and hair • Slide a ball with extensor effect of forearm • Reach activities • Reaching out toward a jar • Driving the wrist/finger extensors to open the paretic hand. • Grabbing the jar • Grasp a ball

Category

Rehabilitation

3

Description

Intervention group: Intervention group 3 will receive combination of both Rood's approach and Task specific training along with common treatment. Rood's approach include: Tapping (over the arm muscle to be facilitated, 3-5 times per repetition, 10 repetitions per day, 3days/ week) • Icing (3-5 sec/ repetition, 10 repetitions/day, 3days/week). • Fast brushing (Apply for 3 to 5seconds & repeated after 30 sec, 10 repetitions/day). • Light touch (3-5 strokes/repetition, 30 sec rest period between strokes, 10 repetitions/day). • Heavy joint compression (Joint Compression >body wt. applied through the longitudinal axis of the bone). Task specific training involve 20-30 trials of each activity. Touch a wall at shoulder level • Touch his cheeks and hair • Slide a ball with extensor effect of forearm • Reach activities • Reaching out toward a jar • Driving the

wrist/finger extensors to open the paretic hand. •

Grabbing the jar • Grasp a ball

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Allied hospital Faisalabad

Full name of responsible person

Dr Sobia Nawaz

Street address

Muslim town, Dr. Tusi Rd, Faisalabad, Pakistan

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Email

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Web page address

<https://www.customercaarepk.com/allied-hospital-support-phone-number-email-id-address-website/>

2

Recruitment center

Name of recruitment center

District headquarter hospital Faisalabad

Full name of responsible person

Dr Shaista Bano

Street address

DHQ hospital Mall Road, Faisalabad, Pakistan

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Faisalabad

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38000

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<https://www.businesslist.pk/company/189531/dhq-hospital-civil-hospital>

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

The University of Faisalabad

Full name of responsible person

Dr Maryam Zafar

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Sargodha Road University Town, Faisalabad, Pakistan

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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 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**

Faisalabad institute of management and Sciences

Full name of responsible person

Maham Saleem

Position

Lecturer

Latest degree

Master

Other areas of specialty/work

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Person responsible for scientific**inquiries****Contact****Name of organization / entity**

Faisalabad institute of management and Sciences

Full name of responsible person

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Latest degree

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Latest degree

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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

I take consent from patients that i will not share their 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
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
I will share outcome data of patients but i will not give
their personal information.
When the data will become available and for how

long
2022
To whom data/document is available
Data will be available to all.
Under which criteria data/document could be used
Whoever will request for data.
From where data/document is obtainable
Data will be obtainable from email id:
mahamsaleem114@gmail.com
**What processes are involved for a request to access
data/document**
Email will be used for requesting to access the data.
Comments