Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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

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+92 41 2644442

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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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Phone
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Fax
+92 41 9210081
Email
principalpmc09@yahoo.com
Web page address
https://www.customercarepk.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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38000
Phone
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Fax
+92 41 9200141
Email
info@pmc.edu.pk
Web page address
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

Street address
Sargodha Road University Town, Faisalabad, Pakistan
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Phone
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Fax
+92 41 8868220
Email
studentaffairshsw@tuf.edu.pk
Web page address
https://tuf.edu.pk/contact

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
Physiotherapy
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Person responsible for scientific inquiries

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Latest degree
Master
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Person responsible for updating data

Contact
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Other areas of specialty/work
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38000
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mahamsaleem114@gmail.com

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