Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Conjunct effect of supported standing and functional electrical stimulation on strength and functional mobility in acute stroke:A randomized clinical trial

Protocol summary

Study aim
To determine the conjunct effects of supported standing and functional electrical stimulation on strength and functional mobility in acute stroke.

Design
Randomized clinical trial.

Settings and conduct
Data was collected from Dr. Ajaz Ali Physical Therapy clinic, and Wahid trust hospital in Gujrat, Punjab Pakistan

Participants/Inclusion and exclusion criteria
Inclusion Criteria 1. Patients 30-65 years of age. 2. Adults with acute stroke. 3. Adults with ischemic stroke. 4. Patients able to react on verbal command. 5. Medically stable patient. 6. Patient was able to walk before stroke. Exclusion Criteria Patients were excluded if they have; 1. Unstable cerebral perfusion. 2. Uncontrolled diabetes mellitus, hypertension and associated cardiac problems. 3. Associated problems in the limb e.g., deep vein thrombosis. 4. Any orthopedic condition e.g., arthritis and fractures. 5. If the physiological variables (blood pressure, oxygen, heart rate, temperature) go beyond set safety limits and patients with severe fatigue.

Intervention groups
Group A: Receiving both Functional electrical stimulation and weight bearing along with conventional therapy. Group B: Receiving early weight bearing along with conventional therapy

Main outcome variables
Strength Functional Mobility

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20190828044636N1**
Registration date: **2021-01-31, 1399/11/12**
Registration timing: **retrospective**

Last update: **2021-01-31, 1399/11/12**
Update count: **0**

Registration date
2021-01-31, 1399/11/12

Registrant information
Name
Sadia Iftikhar
Name of organization / entity
Riphah International University
Country
Pakistan
Phone
+92 53 3515229
Email address
drsipt@gmail.com

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2018-03-10, 1396/12/19

Expected recruitment end date
2018-09-15, 1397/06/24

Actual recruitment start date
2018-03-10, 1396/12/19

Actual recruitment end date
2018-09-25, 1397/07/03

Trial completion date
2018-12-10, 1397/09/19

Scientific title
Conjunct effect of supported standing and functional electrical stimulation on strength and functional mobility in acute stroke:A randomized clinical trial

Public title

Effects of Supported Standing and Functional Electrical Stimulation in acute stroke

Purpose
Treatment

Inclusion/Exclusion criteria

Inclusion criteria:
Patients 30-65 years of age. Adults with acute stroke. Adults with ischemic stroke. Patients able to react on verbal command. Medically stable patient. Patient was able to walk before stroke.

Exclusion criteria:
Unstable cerebral perfusion. Uncontrolled diabetes mellitus, hypertension and associated cardiac problems. Associated problems in the limb e.g., deep vein thrombosis Any orthopedic condition e.g., arthritis and fractures. If the physiological variables (blood pressure, oxygen, heart rate, temperature) go beyond set safety limits and patients with severe fatigue

Age
From **30 years** old to **65 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **58**
Actual sample size reached: **60**

Randomization (investigator's opinion)
Randomized

Randomization description
simple random sampling technique was used .Computer generated randomization technique using the online sequence number generator for random allocation of patients in two groups has been used to collect the data.

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Institutional review board of Riphah International University Lahore campus

Street address
28-M,Quaid-e-Azam, Industrial Estate, Kot Lakhpat, Lahore

City
Lahore

Postal code
54000

Approval date
2018-03-10, 1396/12/19

Ethics committee reference number
Ref.NO.RCRS-RE-MS-NMPT/spring2018/002

Health conditions studied

1

Description of health condition studied
stroke

ICD-10 code
I63

ICD-10 code description
Cerebral infarction

Primary outcomes

1

Description
Strength

Timepoint
Baseline(before intervention) , After 6 weeks of intervention

Method of measurement
Manual muscle testing,The River Mead Mobility Index

Secondary outcomes

1

Description
Balance and Functional mobility

Timepoint
Baseline(before intervention), After six weeks of intervention

Method of measurement
Berge Balance Scale

Intervention groups

1

Description
Intervention group:Group A: Participents were treated with conventional therapy (positioning, ROM exercises, bed mobility exercises) along with FES(Functional Electrical Stimulation) and supported standing by using tilt table initially later on standing frames and walkers for 30 minutes once a day and five times a week for six weeks.Stimulation was applied by two channel comfy stimulators (model no EV-806).stimulations was applied by surface electrodes. Electrodes were applied at the points Gluteus Maximus,QuadricepsFemoris, Tibialis Anterior for 10 minutes each. Stimulation was applied at pulse rate of 40 Hz and pulse width of 180 µs. Group B: received conventional therapy (positioning, ROM exercises, and bed mobility exercises) along with

supported standing by using tilt table initially later on standing frames and walkers for 30 minutes once a day and five times a week. Both groups received treatment for six weeks.

Category
Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center
Wahid Trust hospital

Full name of responsible person
Dr. Abdul Sattar

Street address
Wahid Trust Hospital G.T road Gujrat

City
Gujrat

Postal code
50700

Phone
+92 53 3726115

Email
drasattar1996@gmail.com

2

Recruitment center

Name of recruitment center
Dr. Ajaz Ali physiotherapy services

Full name of responsible person
Dr.Ajaz Ali

Street address
Illahi Plaza,opposite Gujrat Gymkhana, Bhimber Road ,gujrat

City
Gujrat

Postal code
50700

Phone
+92 53 3515229

Email
ejazalisheikh@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Self

Full name of responsible person
Sadia Iftikhar

Street address
Dr. ejaz ali physiotherapy services,illahi plaza bhimbhar road gujrat

City
Gujrat

Postal code
50700

Phone
+92 53 3515229

Fax

Email
drsipt@gmail.com

Web page address

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?
No

Title of funding source
self

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
Persons

Person responsible for general inquiries

Contact

Name of organization / entity
Riphah International University lahore campus

Full name of responsible person
Sadia Iftikhar

Position
Student

Latest degree
Master

Other areas of specialty/work
Physiotherapy

Street address
House no A-3, Muhallah Noor Pur Sharqi, Gujrat

City
Gujrat

Province
Punjab

Postal code
50700

Phone
+92 53 3515229

Email
drsipt@gmail.com

Person responsible for scientific inquiries

Contact

Name of organization / entity
Riphah International University lahore campus

Full name of responsible person
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Person responsible for updating data

Contact

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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
Yes - There is a plan to make this available

Analytic Code
Yes - There is a plan to make this available

Data Dictionary
Yes - There is a plan to make this available

Title and more details about the data/document
data colleted from the primary outcomes only

When the data will become available and for how long
starting 6 months after publications. when it it will be published

To whom data/document is available
people working in academic and clinical practice

Under which criteria data/document could be used
for clinical trial data can be shared

From where data/document is obtainable
through email

What processes are involved for a request to access data/document
when any one want to review it and request trough email than data will be provided

Comments