# Clinical Trial Protocol
# Iranian Registry of Clinical Trials

22 Nov 2026

## EFFECTS OF SPINAL SEGMENTAL EXERCISES VERSUS CONVENTIONAL TREATMENT TO IMPROVE TRUNK STABILITY IN SUB ACUTE STROKE

## Protocol summary


**Study aim**
To determine the effects of spinal segmental exercises versus conventional treatment to improve trunk stability in sub acute stroke.

**Design**
RCT

**Settings and conduct**
Trial conduct in private clinics, Laraib physiotherapy clinic and perfect physio care clinic D.G.Khan. It was a single blind study in which participants are blind

**Participants/Inclusion and exclusion criteria**
INCLUSION CRITERIA: a) Patients within 1 year after onset of stroke. b) Age 35 to 60 years. c) Patients with positive sharpened Romberg test (static balance). d) Patients with Modified Functional reach test (Dynamic balance) specific for sub acute. EXCLUSION CRITERIA a) Patients of pusher syndrome (defined as inclination to the hemi paretic side and giving resistance to any attempt at passive correction). b) Any incurable illness. c) Pain, limitation in the non-paretic lower extremity or restricted motion. d) Patient with cognitive disorders.

**Intervention groups**
INTERVENTIONAL PROTOCOL Group A: In conventional group total 11 patients was recruited by giving conventional therapy for the period of 12 week, consisting of 1 hour of treatment per day, 3 times a week for 12 weeks. Conventional exercises include Exercise 1: supine lying – Leg lifts. Exercise 2: Abdominal crunches in crook lying position. Exercise 3.Back Isometrics.

**Main outcome variables**
Two outcome measuring tools was used TIS (Trunk impairment scale) and Posture Zone mobile app.


## General information

**Reason for update**

**Acronym**

**IRCT registration information**
IRCT registration number: **IRCT20201220049773N1**
Registration date: **2021-03-03, 1399/12/13**
Registration timing: **retrospective**

Last update: **2021-03-03, 1399/12/13**
Update count: **0**

**Registration date**
2021-03-03, 1399/12/13


**Registrant information**

**Name**
Unaza Laraib

**Name of organization / entity**

**Country**
Pakistan

**Phone**
+92 64 2403588

**Email address**
unaiza_laraib94@hotmail.com


**Recruitment status**
**Recruitment complete**

**Funding source**

**Expected recruitment start date**
2020-02-01, 1398/11/12

**Expected recruitment end date**
2021-02-15, 1399/11/27

**Actual recruitment start date**
2020-02-29, 1398/12/10

**Actual recruitment end date**
2021-02-15, 1399/11/27

**Trial completion date**
2021-03-15, 1399/12/25

**Scientific title**
EFFECTS OF SPINAL SEGMENTAL EXERCISES VERSUS CONVENTIONAL TREATMENT TO IMPROVE TRUNK STABILITY IN SUB ACUTE STROKE

**Public title**
EFFECTS OF SPINAL SEGMENTAL EXERCISES VERSUS

CONVENTIONAL TREATMENT TO IMPROVE TRUNK STABILITY IN SUB ACUTE STROKE

**Purpose**
Treatment

**Inclusion/Exclusion criteria**

**Inclusion criteria:**
a) Patients within 1 year after onset of stroke. b) Age 35 to 60 years. c) Patients with positive sharpened Romberg test (static balance). d) Patients with Modified Functional reach test (Dynamic balance) specific for sub acute.

**Exclusion criteria:**
a) History other neurologic diseases or earlier stroke. b) Any incurable illness. c) Pain, limitation in the non-paretic lower extremity or restricted motion. d) Patient with cognitive disorders.

**Age**
From **35 years** old to **60 years** old

**Gender**
Both

**Phase**
N/A

**Groups that have been masked**

- Participant

**Sample size**
Target sample size: **20**
Actual sample size reached: **20**

**Randomization (investigator's opinion)**
Randomized

**Randomization description**
Lottery method

**Blinding (investigator's opinion)**
Single blinded

**Blinding description**
Participants are blind, they don't know in which group they were allocated.

**Placebo**
Used

**Assignment**
Parallel

**Other design features**

## Secondary Ids

empty

## Ethics committees

### 1

**Ethics committee**

**Name of ethics committee**
Secretary Ethical review committee Riphah college of rehabilitation and Allied health sciences

**Street address**
House no 950, Block 18 fareed abad colony

**City**
D.G.Khan

**Postal code**
32200

**Approval date**
2020-03-27, 1399/01/08

**Ethics committee reference number**
022725

## Health conditions studied

### 1

**Description of health condition studied**
Sub acute stroke

**ICD-10 code**

**ICD-10 code description**

## Primary outcomes

### 1

**Description**
To improve trunk stability in sub acute stroke patients

**Timepoint**
12 weeks after intervention

**Method of measurement**
Trunk impairment scale and posture zone mobile app

## Secondary outcomes

### 1

**Description**
none

**Timepoint**
none

**Method of measurement**
none

## Intervention groups

### 1

**Description**
Intervention group: In clinical group total 11 patients was recruited by giving training program of spinal segmental exercises for 3 sessions, 1 hour per day, during a period of 12 weeks. Without devices the bed exercises consisted of bridge exercise with legs crossed, bridge exercise, bridge exercise with one leg, side bridge exercises, curl up with straight reaching and curl up with diagonal reaching

**Category**
Rehabilitation

### 2

**Description**
Control group: In conventional group total 11 patients was recruited by giving conventional therapy for the period of 12 week, consisting of 1 hour of treatment per day, 3 times a week for 12 weeks. Conventional exercises include Exercise 1: supine lying – Leg lifts. Exercise 2: Abdominal crunches in crook lying position. Exercise 3.Back Isometrics.

**Category**
Rehabilitation

## Recruitment centers

**1**

**Recruitment center**
**Name of recruitment center**
Laraib physiotherapy clinic
**Full name of responsible person**
Unaiza Laraib
**Street address**
House no 950, Block 18 fareed abad colony
**City**
D.G.Khan
**Postal code**
32200
**Phone**
+92 64 2403588
**Fax**
**Email**
unaiza_laraib94@hotmail.com
**Web page address**

**2**

**Recruitment center**
**Name of recruitment center**
Perfect physio care clinic
**Full name of responsible person**
Dr Rizwan Ahmed Qureshi
**Street address**
House no 950, Block 18 fareed abad colony
**City**
D.G.Khan
**Postal code**
32200
**Phone**
+92 64 2403588
**Email**
unaiza_laraib94@hotmail.com

## Sponsors / Funding sources

**1**

**Sponsor**
**Name of organization / entity**
Riphah International University Islamabad
**Full name of responsible person**
Dr Misbah Waris
**Street address**
House no 950, Block 18 fareed abad colony
**City**
D.G.Khan
**Postal code**
32200
**Phone**
+92 64 2403588
**Email**
Misbah.Waris@riphah.edu.pk

**Grant name**
**Grant code / Reference number**
**Is the source of funding the same sponsor organization/entity?**
No
**Title of funding source**
Misbah Waris
**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**
Riphah International University Islamabad
**Full name of responsible person**
Dr Misbah Waris
**Position**
Lecturer
**Latest degree**
Master
**Other areas of specialty/work**
Neurology
**Street address**
House no 950, Block 18 fareed abad colony
**City**
D.G.Khan
**Province**
Punjab
**Postal code**
32200
**Phone**
+92 64 2403588
**Email**
Misbah.Waris@riphah.edu.pk

## Person responsible for scientific inquiries

**Contact**
**Name of organization / entity**
Riphah International University Islamabad
**Full name of responsible person**
Dr Misbah Waris
**Position**
Lecturer
**Latest degree**
Master
**Other areas of specialty/work**
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32200

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+92 64 2403588

**Email**

Misbah.Waris@riphah.edu.pk

## Person responsible for updating data

**Contact**

**Name of organization / entity**

Riphah International University Islamabad

**Full name of responsible person**

Dr Misbah Waris

**Position**

Lecturer

**Latest degree**

Master

**Other areas of specialty/work**

Neurology

**Street address**

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**City**

D.G.Khan

**Province**

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**Postal code**

32200

**Phone**

+92 64 2403588

**Email**

Misbah.Waris@riphah.edu.pk

## 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**

Undecided - It is not yet known if there will be 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**

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**

Effects of spinal segmental exercises versus conventional treatment to improve trunk stability in sub acute stroke

**When the data will become available and for how long**

Starting 6 months after publication

**To whom data/document is available**

Not yet decided

**Under which criteria data/document could be used**

Not yet decided

**From where data/document is obtainable**

Not yet decided

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

Not yet decided

**Comments**