

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### Comparison between Rhythmic Initiation and Slow Reversal PNF Technique on Pelvis to improve Static and Dynamic Balance in Stroke Hemiplegic Patients

#### Protocol summary

##### Study aim

The purpose of this study was to compare the effect of rhythmic initiation and slow reversal pelvic PNF technique to improve static and dynamic balance in stroke hemiplegic patients.

##### Design

Randomised controlled trials

##### Settings and conduct

Allied Hospital Faisalabad District Head Quarter Hospital Faisalabad

##### Participants/Inclusion and exclusion criteria

inclusion criteria: 30 participants with hemiplegic stroke, both male and female with 45-60 years of age, With first unilateral stroke within 6 months, were able to walk with walking aids or assistance for 10 meters, No PNF treatment was given to the pelvic area since 6 weeks, Patients on BBS scoring less than or equal to 30 with minimum score 20. Exclusion Criteria: Those participants who had pelvic dysfunction other than stroke, pelvic fracture within last 6 months, having spinal deformity, with cognitive dysfunction, lower limb MSK disorders, Having severe disabling arthritis and patients having cardiopulmonary deficits, having severe degenerative changes and having Benign Paroxysmal Positional Vertigo

##### Intervention groups

Intervention group (Group A) Rhythmic Initiation  
Intervention group (Group B) Slow Reversals

##### Main outcome variables

Static Balance Dynamic Balance

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20210823052272N1**

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

Aamna Masood

###### Name of organization / entity

The University of Faisalabad

###### Country

Pakistan

###### Phone

+92 41 8860190

###### Email address

dpt-fa14-089@tuf.edu.pk

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2021-05-31, 1400/03/10

##### Expected recruitment end date

2021-08-10, 1400/05/19

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Comparison between Rhythmic Initiation and Slow Reversal PNF Technique on Pelvis to improve Static and Dynamic Balance in Stroke Hemiplegic Patients

**Public title**

Comparison of Pelvic PNF techniques to improve balance in stroke patients

**Purpose**

Health service research

**Inclusion/Exclusion criteria****Inclusion criteria:**

Both Male and Female participants of age 45-60 years. With first unilateral stroke within 6 months. The participants who will be able to walk with walking aids or assistance for 10 meters. No PNF treatment given to the pelvic area since 6 weeks. Patients on Berg Balance Scale scoring less than or equal to 30 with minimum score 20

**Exclusion criteria:**

Those participants having pelvic dysfunction other than stroke. Having pelvic fracture within last 6 months. Patients having spinal deformity. Patients with cognitive dysfunction. Patients having lower limb MSK disorders. Having severe disabling arthritis and patients having cardiopulmonary deficits. Patients having severe degenerative changes. Patients having Benign Paroxysmal Positional Vertigo (BPPV).

**Age**

From **45 years** old to **60 years** old

**Gender**

Both

**Phase**

3

**Groups that have been masked**

- Participant

**Sample size**

Target sample size: **30**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

Thirty (n=30) participants were selected for the study. These were randomized through purposive sampling technique which is a type of non-probability sampling technique, into two groups: group A (Rhythmic initiation, n=15) and group B (Slow reversal, n=15). The participants were then randomly allocated to both groups by lottery method.

**Blinding (investigator's opinion)**

Single blinded

**Blinding description**

participants were not told which group they have been allocated, neither they know the treatment of other group participants.

**Placebo**

Not used

**Assignment**

Parallel

**Other design features****Secondary Ids**

empty

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

The ethical committee of The University of Faisalabad

**Street address**

Sargodha road, Faisalabad

**City**

Faisalabad

**Postal code**

38000

**Approval date**

2021-05-25, 1400/03/04

**Ethics committee reference number**

TUF/DR/MSPP/307

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

inability to maintain stability in stroke patients with one sided body weakness.

**ICD-10 code**

I63

**ICD-10 code description**

Cerebral infarction

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

Static and Dynamic Balance

**Timepoint**

before intervention and after the last treatment session

**Method of measurement**

Berg Balance Scale

**Secondary outcomes**

empty

**Intervention groups****1****Description**

Intervention group: Rhythmic Initiation PNF technique

**Category**

Rehabilitation

**2****Description**

Intervention group: Slow Reversals PNF technique

**Category**

Rehabilitation

## Recruitment centers

### 1

#### Recruitment center

**Name of recruitment center**  
Allied Hospital Faisalabad

**Full name of responsible person**  
Sobia Nawaz

**Street address**  
Dr Tusi Road, Faisalabad, Punjab

**City**  
Faisalabad

**Postal code**  
041

**Phone**  
+92 41 9210082

**Email**  
info@pmc.edu.pk

### 2

#### Recruitment center

**Name of recruitment center**  
District Head Quarter Hopsital

**Full name of responsible person**  
Shaista Bano

**Street address**  
Mall Road, Faisalabad, Punjab

**City**  
Faisalabad

**Postal code**  
041

**Phone**  
+92 41 9200140

**Email**  
vcfmuf@gmail.com

## Sponsors / Funding sources

### 1

#### Sponsor

**Name of organization / entity**  
The University of Faisalabad

**Full name of responsible person**  
Sidra Majeed

**Street address**  
Sargodha Rd, University Town, Faisalabad, Punjab  
38000

**City**  
Faisalabad

**Postal code**  
041

**Phone**  
+92 41 8868326

**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

Other

## Person responsible for general inquiries

#### Contact

**Name of organization / entity**  
The University of Faisalabad

**Full name of responsible person**  
Aamna Masood

**Position**  
Student

**Latest degree**  
Bachelor

**Other areas of specialty/work**  
Physiotherapy

**Street address**  
666- K Gulistan Colony no 1

**City**  
Faisalabad

**Province**  
Punjab

**Postal code**  
041

**Phone**  
+92 41 8860190

**Email**  
aamnamasood27@gmail.com

## Person responsible for scientific inquiries

#### Contact

**Name of organization / entity**  
The University of Faisalabad

**Full name of responsible person**  
Aamna Masood

**Position**  
Student

**Latest degree**  
Bachelor

**Other areas of specialty/work**  
Physiotherapy

**Street address**  
666- K Gulistan Colony no 1 FSD

**City**  
Faisalabad

**Province**

Punjab  
**Postal code**  
041  
**Phone**  
+92 41 8860190  
**Email**  
aamnamasood27@gmail.com

## Person responsible for updating data

### Contact

**Name of organization / entity**  
The University of Faisalabad  
**Full name of responsible person**  
Aamna Masood  
**Position**  
Student  
**Latest degree**  
Bachelor  
**Other areas of specialty/work**  
Physiotherapy  
**Street address**  
666- Gulistan Colony no 1 FSD  
**City**  
Faisalabad  
**Province**  
Punjab  
**Postal code**  
041  
**Phone**  
+92 41 8860190  
**Email**  
aamnamasood27@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

a consent form was signed from patients, that their data will be safe including identity and contact information and not shared to anyone.

### 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

the data regarding outcome measures will be shared, but the identity of patient will be kept hidden because a consent was signed from them

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

2022

### To whom data/document is available

everyone related to this field.

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

whoever will request for data

### From where data/document is obtainable

document is obtainable through email address

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

to access data one should approach through the email provided.

### Comments