

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

11 Sep 2026

### Comparing the Effects of Integrated Neuromuscular Inhibition Technique versus Percussive Massage along with Stretching in Plantar Fasciitis: A Randomized Clinical Trial

#### Protocol summary

##### Study aim

Assessing the comparative effect of integrated neuromuscular inhibition technique and percussive massage with stretching on pain, function and balance of patients with plantar fasciitis.

##### Design

Randomized clinical trial

##### Settings and conduct

THQ hospital Jaranwala and Khidmat e Insani hospital Jaranwala

##### Participants/Inclusion and exclusion criteria

Inclusion: Age of 25 to 40 Y, Heel pain untreated for less than 6 months, Subjects with plantar fasciitis diagnosed by Windlass test, Pain on medial tubercle of calcaneus. Exclusion: Recent lower limb fractures and arthrosis, congenital deformity of foot, ankle sprain, calcaneal spurs on medial side of calcaneum, fibromyalgia syndrome, Rheumatoid arthritis, pregnant and tarsal tunnel syndrome

##### Intervention groups

Group A will receive Percussive Massage with Stretching  
Group B will receive Integrated Neuromuscular Inhibition Technique

##### Main outcome variables

Pain (Numeric Pain Rate Scale) Lower extremity dynamic balance (Star Excursion Balance Test (SEBT)) Lower limb disability (Foot and Ankle Disability Index)

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20220930056062N8**

Registration date: **2026-06-08, 1405/03/18**

Registration timing: **prospective**

Last update: **2026-06-08, 1405/03/18**

Update count: **0**

##### Registration date

2026-06-08, 1405/03/18

##### Registrant information

###### Name

Kaiynat Shafique

###### Name of organization / entity

The University of Faisalabad

###### Country

Pakistan

###### Phone

+92 334 6925051

###### Email address

kaiynatshafique@yahoo.com

##### Recruitment status

###### Recruitment complete

##### Funding source

##### Expected recruitment start date

2026-06-15, 1405/03/25

##### Expected recruitment end date

2026-08-15, 1405/05/24

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Comparing the Effects of Integrated Neuromuscular Inhibition Technique versus Percussive Massage along with Stretching in Plantar Fasciitis: A Randomized Clinical Trial

##### Public title

Comparing the Effects of Integrated

NeuromuscularInhibition Technique versus Percussive  
Massage alongwith Stretching in Plantar Fasciitis: A  
RandomizedClinical Trial

#### **Purpose**

Treatment

#### **Inclusion/Exclusion criteria**

##### **Inclusion criteria:**

Heel pain untreated for less than 6 months as a result of  
irritated plantar fasci withtrigger point in calf muscles.  
Subjects with plantar fasciitis diagnosed by Windlass test  
and those with positive testwere included Those who  
have a history of experiencing heel pain when taking  
their first few steps inthe morning or after prolonged  
non-weight bearing activities Pain on medial tubercle of  
calcaneus Subjects ranging between the age of 25 to 40  
y

##### **Exclusion criteria:**

History of recent foot and ankle and lower limb fractures  
Arthrosis of the ankle, knee, and hip Patients with  
referred pain like sciatica or any other neurological cause  
will also beexcluded Patients with any congenital  
deformity of foot Patient with any degree of ankle sprain  
Patient with calcaneal spurs on medial side of calcaneum  
Patients with fibromyalgia syndrome or Rheumatoid  
arthritis Patients who were pregnant Patients with tarsal  
tunnel syndrome

#### **Age**

From **25 years** old to **40 years** old

#### **Gender**

Both

#### **Phase**

N/A

#### **Groups that have been masked**

- Outcome assessor
- Data analyser

#### **Sample size**

Target sample size: **34**

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

Randomized

#### **Randomization description**

Randomization through lottery method

#### **Blinding (investigator's opinion)**

Single blinded

#### **Blinding description**

Outcome assessor will be blind in this clinical tria

#### **Placebo**

Not used

#### **Assignment**

Other

#### **Other design features**

### **Secondary Ids**

empty

### **Ethics committees**

#### **1**

**Ethics committee**

#### **Name of ethics committee**

The University of Faisalabad

#### **Street address**

west canal, Faisalabad

#### **City**

Faisalabad

#### **Postal code**

38000

#### **Approval date**

2025-12-20, 1404/09/29

#### **Ethics committee reference number**

TUF/EIRB/147/25

### **Health conditions studied**

#### **1**

##### **Description of health condition studied**

Plantar Fasciitis

##### **ICD-10 code**

M72.2

##### **ICD-10 code description**

Plantar Fasciitis

### **Primary outcomes**

#### **1**

##### **Description**

Foot Pain

##### **Timepoint**

pain will be measured three times. Before the start of 1st  
session, after 2 weeks and third time after 4 weeks

##### **Method of measurement**

Numeric Pain Rate Scale

#### **2**

##### **Description**

Foot and and ankle disability

##### **Timepoint**

Foot and and ankle disability will be measured three  
times. Before the start of 1st session, after 2 weeks and  
third time after 4 weeks

##### **Method of measurement**

Foot and Ankle disability index

#### **3**

##### **Description**

Dynamic balance

##### **Timepoint**

Dynamic balance will be measured three times. Before  
the start of 1st session, after 2 weeks and third time  
after 4 weeks

##### **Method of measurement**

Star Excursion Balance Test

### **Secondary outcomes**

empty

## Intervention groups

1

### Description

Intervention group: percussive massage with massage gun and stretching.

### Category

Treatment - Other

2

### Description

Intervention group: integrated neuromuscular inhibition training.

### Category

Treatment - Other

## Recruitment centers

1

### Recruitment center

#### Name of recruitment center

THQ hospital Jaranwala

#### Full name of responsible person

Kaiynat Shafique

#### Street address

Faisalabad

#### City

Faisalabad

#### Postal code

38000

#### Phone

+92 334 6925051

#### Email

kforkaiynat@gmail.com

## Sponsors / Funding sources

1

### Sponsor

#### Name of organization / entity

The University of Faisalabad

#### Full name of responsible person

Kaiynat Shafique

#### Street address

Faisalabad

#### City

Faisalabad

#### Postal code

38000

#### Phone

+92 334 6925051

#### Email

kforkaiynat@gmail.com

#### Grant name

#### Grant code / Reference number

#### Is the source of funding the same sponsor organization/entity?

No

### Title of funding source

It was a self funded study

### 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

Dr. Kaiynat Shafique; PT

#### Position

Lecturer

#### Latest degree

Master

#### Other areas of specialty/work

Physiotherapy

#### Street address

West canal; Faisalabad

#### City

Faisalabad

#### Province

Punjab

#### Postal code

38000

#### Phone

+92 334 6925051

#### Email

kforkaiynat@gmail.com

## Person responsible for scientific inquiries

### Contact

#### Name of organization / entity

The university of Faisalabad

#### Full name of responsible person

Dr. Kaiynat Shafique

#### Position

Lecturer

#### Latest degree

Master

#### Other areas of specialty/work

Physiotherapy

#### Street address

West canal; Faisalabad

#### City

Faisalabad

#### Province

Punjab

#### Postal code

38000

**Phone**  
+92 334 6925051  
**Email**  
kforkaiynat@gmail.com

+92 334 6925051  
**Email**  
kforkaiynat@gmail.com

## Person responsible for updating data

### Contact

**Name of organization / entity**  
The university of Faisalabad  
**Full name of responsible person**  
Dr. Kaiynat Shafique  
**Position**  
Lecturer  
**Latest degree**  
Master  
**Other areas of specialty/work**  
Physiotherapy  
**Street address**  
West canal; Faisalabad  
**City**  
Faisalabad  
**Province**  
Punjab  
**Postal code**  
38000  
**Phone**

## Sharing plan

### Deidentified Individual Participant Data Set (IPD)

Undecided - It is not yet known if there will be 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

No - There is not a plan to make this available

### Clinical Study Report

Undecided - It is not yet known if there will be 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