

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### Effects of Gastrocnemius recession versus physical therapy in chronic plantar fasciitis

#### Protocol summary

##### Study aim

The study aims to evaluate the effects of gastrocnemius recession versus physiotherapy in chronic plantar fasciitis.

##### Design

Parallel, 40 Sample size, Randomized Controlled Trial, single-blinded

##### Settings and conduct

The trial will be conducted in the Physiotherapy Department of Punjab Social Security Health Management Company Hospital. Assessor will be completely blind to outcomes.

##### Participants/Inclusion and exclusion criteria

Inclusion Criteria: Age 30-50 years individuals, Male and female both, Heel pain lasting > 3 months, Pain in the morning, Tenderness over medial plantar fascia insertion, Positive Silfverskiöld test Exclusion Criteria: Degenerative arthritis of the hindfoot joints, Systemic joint disease, Previous injury or surgery to the foot or ankle, Inoperable due to comorbidity

##### Intervention groups

Group A. PHYSICAL THERAPY PHONOPHORESIS, STRETCHING, and MANUAL THERAPY were done on alternate days for 4 weeks. The calf muscle and/or plantar fascia-specific stretching will be used to provide pain relief and improvement in calf muscle flexibility 3 times a day (3 minutes) stretching time, for three months in-home plan. Group B. GASTROCNEMIUS RECESSION Patients randomized to surgery will be operated on with a proximal medial gastrocnemius recession (PMGR) as described by Barouk. Patients were instructed to continue the stretching exercises and fully weight-bear from the first postoperative day. If needed, the patients were allowed to use crutches during the first 2 weeks after surgery.

##### Main outcome variables

numeric rating scale, Foot and Ankle Ability Measure (FAAM)Activities of Daily Living Subscale, ankle hindfoot scale, The Short Form-36 (SF-36)

#### General information

##### Reason for update

##### Acronym

RCT

##### IRCT registration information

IRCT registration number: **IRCT20210704051785N3**

Registration date: **2023-08-05, 1402/05/14**

Registration timing: **retrospective**

Last update: **2023-08-05, 1402/05/14**

Update count: **0**

##### Registration date

2023-08-05, 1402/05/14

##### Registrant information

##### Name

Sarwat Anees

##### Name of organization / entity

Sharif medical and dental college

##### Country

Pakistan

##### Phone

+92 42 35397101

##### Email address

sarwatasifmehmood@gmail.com

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2023-07-01, 1402/04/10

##### Expected recruitment end date

2023-07-01, 1402/04/10

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

## Scientific title

Effects of Gastrocnemius recession versus physical therapy in chronic plantar fasciitis

## Public title

surgery versus physiotherapy which treatment is better for heel pain.

## Purpose

Treatment

## Inclusion/Exclusion criteria

### Inclusion criteria:

Heel pain lasting > 3 months Pain in morning(morning stiffness) Tenderness over medial plantar fascia insertion Positive Silfverskiöld test not recieved physiotherapy session

### Exclusion criteria:

Degenerative arthritis of the hindfoot joints Systemic joint disease Previous injury or surgery to the foot or ankle Inoperable due to comorbidity

## Age

From **30 years** old to **50 years** old

## Gender

Both

## Phase

N/A

## Groups that have been masked

- Investigator

## Sample size

Target sample size: **40**

## Randomization (investigator's opinion)

Randomized

## Randomization description

The sealed envelope method will be used for random allocation. 40 sealed envelopes (20 for Group A and 20 for Group B) will be prepared. 20 envelopes will contain the letter A, and 20 will include the letter B on a card. The patient will be asked to choose one envelope. Treatment will be given according to treatment group (Group A: control, Group B: experiment).

## Blinding (investigator's opinion)

Single blinded

## Blinding description

Senior physiotherapists will assess the patient before and after treatment. Senior physiotherapist/assessor will be blinded entirely about patient allocation group (control/intervention).

## Placebo

Not used

## Assignment

Parallel

## Other design features

no

## Secondary Ids

empty

## Ethics committees

## 1

### Ethics committee

#### Name of ethics committee

the superior university ethics committee

#### Street address

raiwind road, lahore

#### City

lahore

#### Postal code

55150

### Approval date

2023-06-10, 1402/03/20

### Ethics committee reference number

Ref:03-PEAC-1-23

## Health conditions studied

## 1

### Description of health condition studied

Plantar fasciitis, heel pain

### ICD-10 code

M72.2

### ICD-10 code description

Plantar fascial fibromatosis

## Primary outcomes

## 1

### Description

pain intensity

### Timepoint

numeric pain rating scale will be measured at baseline and at 3 months and at 6 months

### Method of measurement

measured by numeric pain rating scale

## 2

### Description

foot and ankle function involving a range of daily activities

### Timepoint

foot and ankle function involving a range of daily activities will be assessed at baseline and at 3 months and at 6 months.

### Method of measurement

foot and ankle function involving a range of daily activities(FAAM-ADL) scale used

## 3

### Description

the american orthopedic foot and ankle society ANKLE-HINDFOOT scale

### Timepoint

will be assessed at baseline and at 3 months and at 6 months.

### Method of measurement

AOFAS ankle hindfoot scale used

## Secondary outcomes

### 1

#### Description

health related quality of life

#### Timepoint

will be assessed at baseline and at 3 months and at 6 months.

#### Method of measurement

the short form SF-36 used.

## Intervention groups

### 1

#### Description

Intervention group: Phonophoresis with ketoprofen gel will reduce pain on alternate days for 4 weeks. Stretching Calf muscle and plantar fascia-specific stretching will be used to relieve pain and improve calf muscle flexibility 3 times a day (3 minutes) stretching time, for three months in the home plan. Manual therapy procedures include talocrural joint posterior glide, subtalar joint lateral glide, anterior and posterior glides of the first tarsometatarsal joint, and subtalar joint distraction manipulation, done on alternate days for 4 weeks

#### Category

Treatment - Other

### 2

#### Description

Intervention group: Patients randomized to surgery will be operated with a proximal medial gastrocnemius recession (PMGR) as described by Barouk (17) (Figure 1). No additional procedures will be performed. The operation will be performed with the patients in a prone position under local anesthetic or general anesthesia. A 3-cm transverse skin incision was made in the popliteal fossa, the fascia was opened, and the medial gastrocnemius with its tendon was located. The tendon was then cut while lifting the gastrocnemius with clamps, and care was taken to cut only the white tendon while sparing the underlying muscle. While performing a dorsiflexion movement of the ankle, careful palpation of the muscle was done to ensure that all tendon strands were cut completely. The incision was closed in layers, and only soft dressings were applied. Patients were instructed to continue the stretching exercises and fully weight-bear from the first postoperative day. If needed, the patients were allowed to use crutches during the first 2 weeks after surgery. Sutures were removed 2 weeks after surgery. Calf muscle and plantar fascia-specific stretching will be used to relieve pain and improve calf muscle flexibility 3 times a day (3 minutes) stretching time, for three months in the home plan

#### Category

Treatment - Surgery

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Punjab Social Security Health Management Company Hospital, Raiwind, Lahore

##### Full name of responsible person

Sarwat Anees

##### Street address

8km manga road, raiwind

##### City

lahore

##### Postal code

55150

##### Phone

+92 303 4846498

##### Email

psshmc@0rg.pk

##### Web page address

### 2

#### Recruitment center

##### Name of recruitment center

the sharif city polyclinic raiwind

##### Full name of responsible person

Sarwat Anees

##### Street address

Sharif polyclinic, near Muzammil Mart, railway road, raiwind

##### City

lahore

##### Postal code

55150

##### Phone

+92 303 4846498

##### Fax

+92 303 4846498

##### Email

sharifmedicalcity@org.edu.pk

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

sharif medical and dental college

##### Full name of responsible person

Sarwat Anees

##### Street address

Sharif polyclinic, near doce bakers, railway road, raiwind

##### City

raiwind

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55150

##### Phone

+92 303 4846498

##### Fax

+92 42 37860122

**Email**

sarwatasifmehmood@gmail.com

**Grant name**

**Grant code / Reference number**

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

No

**Title of funding source**

funding

**Proportion provided by this source**

1

**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**

Punjab Social Security Health Management Company  
Hospital

**Full name of responsible person**

Sarwat Anees

**Position**

Physiotherapist

**Latest degree**

Bachelor

**Other areas of specialty/work**

Physiotherapy

**Street address**

Sharif Polyclinic, near Doce Bakers, Railway Road,  
Raiwind

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Lahore

**Province**

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**Postal code**

55150

**Phone**

+92 303 4846498

**Email**

sarwatasifmehmood@gmail.com

**Person responsible for scientific inquiries**

**Contact**

**Name of organization / entity**

Sharif medical and dental college

**Full name of responsible person**

Sarwat Anees

**Position**

Assistant professor

**Latest degree**

Master

**Other areas of specialty/work**

Physiotherapy

**Street address**

Sharif polyclinic, near Muzammil Mart, railway road,  
raiwind

**City**

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**Province**

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**Postal code**

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**Phone**

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**Email**

sarwatasifmehmood@gmail.com

**Person responsible for updating data**

**Contact**

**Name of organization / entity**

Sharif medical and dental college

**Full name of responsible person**

Sarwat Anees

**Position**

Assistant professor

**Latest degree**

Master

**Other areas of specialty/work**

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**Phone**

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**Fax**

**Email**

sarwatasifmehmood@gmail.com

**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**

Undecided - It is not yet known if there will be 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