

Clinical Trial Protocol

Iranian Registry of Clinical Trials

09 Jun 2026

Effect of Kaltenborn joint mobilization along with Graston technique on pain and gait in patients with plantar fasciitis

Protocol summary

Study aim

The major goal of study is to evaluate impacts of Graston technique and Kaltenborn joint mobilization on pain, range and gait in patients with plantar fasciitis.

Design

A single blinded quantitative study following the research design of randomized control trial. Randomization will be through lottery method. Active treatment group will be used to compare results.

Settings and conduct

Subjects with plantar fasciitis will be taken from these 3 clinics settings. Faisal hospital faisalabad, IDC physiofit faisalabad, Pro health rehab and medical center: participants will be blinded they will not aware whether they are in treatment group or in control group. Participants will receive baseline treatment and Kaltenborn joint mobilization will be given to treatment group and participants will not aware of that.

Participants/Inclusion and exclusion criteria

Subjects having heel pain for more than 1 month, history of plantar discomfort in first few steps, pain with palpable soreness in medial tubercle of heel and positive windlass test will be included in the study. Subjects having these conditions will be excluded: Previous lower or back surgery, trauma within six months, leg length difference, pregnancy, tarsal tunnel syndrome, acute ankle sprain, achilles tendinopathy.

Intervention groups

Group A. Baseline treatment (ultrasound for 15 min and Graston technique) Group B. Baseline treatment (ultrasound for 15 min and Graston technique) + Kaltenborn joint mobilization

Main outcome variables

Visual Analogue Scale for Pain Goniometer for range of motions

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20230717058824N1**
Registration date: **2023-07-23, 1402/05/01**
Registration timing: **prospective**

Last update: **2023-07-23, 1402/05/01**

Update count: **0**

Registration date

2023-07-23, 1402/05/01

Registrant information

Name

Sarwat Mehmood

Name of organization / entity

The university of Faisalabad

Country

Pakistan

Phone

+92 305 7241745

Email address

sarwathmehmood1@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-07-24, 1402/05/02

Expected recruitment end date

2023-08-24, 1402/06/02

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of Kaltenborn joint mobilization along with Graston technique on pain and gait in patients with plantar

fasciitis

Public title

Effect of Kaltenborn joint mobilization along with Graston technique on pain and gait in patients with plantar fasciitis

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Heel pain for more than month history of plantar discomfort in course of few steps pain extended non weight bearing actions history of pain in first few steps pain with palpable soreness in medial tubercle of heel Positive windlass test

Exclusion criteria:

Previous lower or back surgery Trauma or fracture within six months leg length difference more than 1 cm use of corticosteroids within six months pregnancy not able to carry workout programme Trasal tunnel syndrome,acute ankle sprains,calcaneal spurs,heel pad syndrome,achilles tendinopathy, patellofemoral syndrome

Age

From **20 years** old to **50 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant

Sample size

Target sample size: **50**

Randomization (investigator's opinion)

Randomized

Randomization description

Sample will be allocated to Group A(baseline treatment) and Group B(baseline +kaltenborn joint mobilization) randomly using lottery method. Method of randomization is simple randomization. Tool of randomization is lottery method.

Blinding (investigator's opinion)

Single blinded

Blinding description

Participants of both groups will be unaware whether they are in baseline group or treatment group after the informed consent.both groups will receive same baseline treatment and after that physiotherapist will apply kaltenborn joint mobilization to the group of which participants will be unaware of.

Placebo

Not used

Assignment

Other

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of University of Faisalabad

Street address

4-Km Sargodha Road, University Town

City

Faisalabad

Postal code

38000

Approval date

2023-05-01, 1402/02/11

Ethics committee reference number

TUF/DR/MSPP/045

Health conditions studied

1

Description of health condition studied

Plantar fasciitis is a common heel pain condition, constitutes for 40-50% for all foot pain problems. It is due to over standing or due to over weight bearing at feet and condition is aggravated by physical activities like standing and weight bearing. Other associated symptoms are pain and soreness at plantar of foot. According to some researches PF can lead to micro injuries in the foot.

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Pain in the foot will be primary outcome variable

Timepoint

Pain level will be measured before applying the intervention and then after 4 weeks after the completion of intervention.

Method of measurement

Visual Analogue Scale will be used to measure the pain.

2

Description

Range of motions at foot and ankle

Timepoint

Range of motions will be measured before applying the intervention and then after 4 weeks after the completion of intervention.

Method of measurement

Goniometer use to measure range of motions at ankle and foot.

Secondary outcomes

1

Description

Gait

Timepoint

Gait will be measured before applying intervention and after 4 weeks after the completion of intervention.

Method of measurement

Rivermead visual gait assessment

Intervention groups

1

Description

Intervention group:

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Faisal Hospital, Faisalabad

Full name of responsible person

Medical Superintendent Faisal Hospital

Street address

673-A lower canal road East, peoples,s colony

City

Faisalabad

Postal code

38000

Phone

+92 41 8719679

Email

info@faisalhospital.com.pk

2

Recruitment center

Name of recruitment center

Physiofit IDC, Faisalabad

Full name of responsible person

Medical Superintendent

Street address

563-B, Satiana road, Peoples colony

City

Faisalabad

Postal code

38000

Phone

+92 41 8713737

Email

info@idc.net.pk

3

Recruitment center

Name of recruitment center

Pro health rehab and medical center

Full name of responsible person

Medical Superintendent

Street address

P-346 kashmir road, C block Amin town

City

Faisalabad

Postal code

38000

Phone

+92 331 1204747

Email

prohealthrehab47@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

The University of Faisalabad

Full name of responsible person

dr. Sidra Majeed, PT

Street address

4-Km Sargodha road, University Town

City

Faisalabad

Postal code

38000

Email

sidra.majeed@tuf.edu.pk

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

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

The University of Faisalabad

Full name of responsible person

Sarwat Mehmood

Position

Student

Latest degree

Master

Other areas of specialty/work

Physiotherapy

Street address

House no 29,block X, street no 3, madina town

City

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Person responsible for scientific inquiries

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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

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

Title and more details about the data/document

All collected deidentified participant data set for the outcome measures.

When the data will become available and for how long

4 months after publication

To whom data/document is available

People working in the academic institutions.

Under which criteria data/document could be used

IPD and any additional supporting documents will be provided for the research on the similar topic and can be obtained by asking through the contact person mentioned below.

From where data/document is obtainable

Contact person: Sarwat Mehmood contact no 0092 3057241745 , email sarwatmehmood1@gmail.com

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

Data files will be provided after talking to the contact person as mention in the above slot

Comments