Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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 pateints 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 exclude-Previous lower or back surgery, trauma within six months, leg length difference, pregnancy,trasal 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
sarwatmehmood1@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, consititutes 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

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Person responsible for scientific inquiries

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Person responsible for updating data

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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 deindentified 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