Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Comparative effects of instrument assisted soft tissue mobilization and deep transverse friction massage on pain and gait parameters of iliotibial band syndrome

Protocol summary

Study aim
Evaluate the effects of instrument assisted soft tissue mobilization and deep transverse friction massage on pain and gait parameter among patients with Iliotibial band syndrome.

Design
Randomized clinical trial, Non-probability purposive sampling technique (random allocation to groups by means of lottery method) was used in this study.

Settings and conduct
• Physio Fixx Physiotherapy & Pain Relief Center, Faisalabad • Physiotherapy & Pain Relief Center, Faisalabad • Physiotherapist Center, Faisalabad • Recovery Healthcare Clinic, Faisalabad • InMotion Physiotherapy and Rehabilitation Clinic, Faisalabad • Human Care Physiotherapy and Rehab Center, Faisalabad

Participants/Inclusion and exclusion criteria
Inclusion Criteria • Male patients with IT band tightness • Sitting for minimum 6-7 hour • Positive Ober's test • Age ranging between 25-45 years • Having pain (3-7 on numeric pain rating scale) • Willing to participate was included into study Exclusion Criteria • Participants with any diagnosed musculoskeletal or auto-immune disorder • Having co-morbidities such as neoplasm etc • Undergone lower limb surgery in past 6 months • Having any neurological or vascular disorders or infectious disease • Participants with physical impairment • Participants taking medication (NSAIDS and steroids)

Intervention groups
For group A Instrument assisted soft tissue mobilization (IASTM) was given for 10 mins of warm up session using ultrasound as baseline treatment. For group B transverse deep friction massage was given along with the baseline treatment.

Main outcome variables
Pain, Range of motion, Q angle

General information

Reason for update
To update actual recruitment date

Acronym
IASTM (INSTRUMENT ASSISTED SOFT TISSUE MOBILIZATION), DTFM (DEEP TRANSVERSE FRICTION MASSAGE), ITBS (ILIOTIBIAL BAND SYNDROME)

IRCT registration information
IRCT registration number: **IRCT20230413057897N1**
Registration date: **2023-08-18, 1402/05/27**
Registration timing: **prospective**

Last update: **2023-12-24, 1402/10/03**
Update count: **1**

Registration date
2023-08-18, 1402/05/27

Registrant information

Name
Muhammad Hanan Abdullah

Name of organization / entity
The University of Faisalabad

Country
Pakistan

Phone
+92 310 7436476

Email address
abdullahhanan920@gmail.com

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2023-08-20, 1402/05/29

Expected recruitment end date
2023-11-25, 1402/09/04

Actual recruitment start date

2023-08-25, 1402/06/03

Actual recruitment end date

2023-11-30, 1402/09/09

Trial completion date

2023-12-05, 1402/09/14

Scientific title

Comparative effects of instrument assisted soft tissue mobilization and deep transverse friction massage on pain and gait parameters of iliotibial band syndrome

Public title

Comparative effects of instrument assisted soft tissue mobilization and deep transverse friction massage on pain and gait parameters of iliotibial band syndrome

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Male patients with IT band tightness Sitting for minimum 6-7 hour Positive Ober's test Age ranging between 25-45 years Having pain (3-7 on numeric pain rating scale) Willing to participate will be included into study

Exclusion criteria:

Participants with any diagnosed musculoskeletal or auto-immune disorder Having co-morbidities such as neoplasm etc Undergone lower limb surgery in past 6 months Having slump test negative Having any neurological or vascular disorders or infectious disease Participants with physical impairment Participants taking medication (NSAIDS and steroids)

Age

From **25 years** old to **45 years** old

Gender

Male

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **24**

Actual sample size reached: **24**

Randomization (investigator's opinion)

Randomized

Randomization description

Study is randomized control trial and purposive sampling technique (random allocation to groups by means of lottery method) used in this study.

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Other

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

RESEARCH AND ETHICS / TECHNICAL COMMITTEE

Street address

Faisal Town, West Canal Road

City

Faisalabad

Postal code

38000

Approval date

2023-03-10, 1401/12/19

Ethics committee reference number

2021-MSPT-070

Health conditions studied

1

Description of health condition studied

ILIOTIBIAL BAND SYNDROME

ICD-10 code

M76.3

ICD-10 code description

Iliotibial band syndrome

2

Description of health condition studied

PAIN OF ILIOTIBIAL BAND SYNDROME

ICD-10 code

G89.29

ICD-10 code description

Other chronic pain

3

Description of health condition studied

GAIT IN ILIOTIBIAL BAND SYNDROME

ICD-10 code

R26.89

ICD-10 code description

Other abnormalities of gait and mobility

Primary outcomes

1

Description

Pain

Timepoint

Before intervention and 3 week after intervention

Method of measurement

Numerical Pain Raiting Scale

2

Description

Hip range of motion (abduction)

Timepoint
Before intervention and 3 week after intervention
Method of measurement
Goniometer

3

Description
Q angle
Timepoint
Before intervention and 3 week after intervention
Method of measurement
Goniometer

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: IASTM
Category
Treatment - Devices

2

Description
Intervention group: DTFM
Category
Treatment - Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Physio Fix Physiotherapy & Pain Relief Center
Full name of responsible person
Nabeel Zahid
Street address
Peoples Colony#1 Canal Road Fsd
City
Faisalabad
Postal code
38000
Phone
+92 310 7436476
Email
abdullahhanan920@gmail.com

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
The University of Faisalabad
Full name of responsible person
Dr Sidra Majeed
Street address
4-Km Sargodha road, University Town, Faisalabad. Pakistan
City
Faisalabad
Postal code
38000
Phone
+92 41 8868326
Email
info@tuf.edu.pk
Web page address
https://www.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
Dr Sidra Majeed
Position
Associate Professor
Latest degree
Master
Other areas of specialty/work
Physiotherapy
Street address
4-Km, Sargodha road, Faislabad. Pakistan
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Person responsible for scientific inquiries

Contact

Name of organization / entity
The University of Faisalabad

Full name of responsible person
Hanan Abdullah

Position
Student

Latest degree
Master

Other areas of specialty/work
Physiotherapy

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Person responsible for updating data

Contact

Name of organization / entity
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Full name of responsible person
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Position
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Latest degree
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Other areas of specialty/work
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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
Undecided - It is not yet known if there will be 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 de identified participants data set for outcome measures.

When the data will become available and for how long
4 months

To whom data/document is available
people working in academic institutions.

Under which criteria data/document could be used
IPD and any other additional documents

From where data/document is obtainable
contact person: Hanan Abdullah Contact no. 92310-7436476

What processes are involved for a request to access data/document
Data will be provided by contacting the above mentioned person.

Comments