Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Comparison of Muscle Energy technique and Mobilization with Movement to reduce pain and improve functional status in subjects with anterior innominate iliosacral dysfunction

Protocol summary

Study aim
To compare Muscle energy technique and Mobilization with movement to reduce pain and improve functional status in subjects with anterior innominate iliosacral dysfunction.

Design
Single blinded, randomized clinical trial (RCT), assessor will be blinded

Settings and conduct
Settings: 1.Lifeline Hospital, Johar town Lahore, Pakistan 2.Fatima Memorial Hospital. Shadman, Lahore. Conduct: Single blinded, outcome assessor will be blinded.

Participants/Inclusion and exclusion criteria
Inclusion criteria: Patients aged from 18 to 45 years old; Patients with lumbopelvic pain radiating to knee and associated groin region; Positive SI joint dysfunction test (= or more than 3 tests positive); Seated / standing flexion test must be positive. Exclusion criteria: Pregnant females; Ankylosing spondylitis; SLR< 45 degree; Previous surgical history of back; Diagnosed by physician with any other disease other than iliosacral dysfunction.

Intervention groups
Intervention group 1: Muscle Energy Techniques (MET's). Muscle Energy Technique for Anterior Innominate Iliosacral Dysfunction will be applied to Hamstrings and Iliopsoas muscles. Intervention group 2: Mobilization with Movement (MWM). Mulligan's Mobilization with Movement for Anterior innominate Iliosacral dysfunction will be given to this group.

Main outcome variables
Pain; Functional Disability

General information

Reason for update

Acronym
CMETOAIID

IRCT registration information
IRCT registration number: **IRCT20191122045467N1**
Registration date: **2020-02-12, 1398/11/23**
Registration timing: **registered_while_recruiting**

Last update: **2020-02-12, 1398/11/23**
Update count: **0**

Registration date
2020-02-12, 1398/11/23

Registrant information
Name
Hira Akram
Name of organization / entity
Riphah International University
Country
Pakistan
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+92 42 35126110
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hi.mohsin24@gmail.com

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2019-12-07, 1398/09/16

Expected recruitment end date
2020-03-03, 1398/12/13

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Comparison of Muscle Energy technique and Mobilization

with Movement to reduce pain and improve functional status in subjects with anterior innominate iliosacral dysfunction

Public title
The effect of Muscle Energy technique and Mobilization with Movement anterior innominate iliosacral dysfunction
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
Patients aged from 18 to 45 years old Patients with lumbopelvic pain radiating to knee and associated groin region Positive SI joint dysfunction test (= or more than 3 positive tests) Seated / standing flexion test must be positive
Exclusion criteria:
Pregnant females Ankylosing spondylitis SLR< 45 degrees Previous surgical history of back Diagnosed by physician with any other disease other than iliosacral dysfunction
Age
From **18 years** old to **45 years** old
Gender
Both

Phase
N/A
Groups that have been masked

- Outcome assessor

Sample size
Target sample size: **36**
Randomization (investigator's opinion)
Randomized
Randomization description
Once the above mentioned inclusion and exclusion criteria will be taken into account, potential participants will be considered. They will be requested to participate in the study. Written informed consent will be taken. Each participant will be requested to draw either odd number or even number from a box. Odd Numbers will be allocated to Group A and even number will be allocated to group B.
Blinding (investigator's opinion)
Single blinded
Blinding description
The study is single blinded. The assessment will be done by one therapist and treatment will be given by other therapist. So the assessor will be blinded with regard of treatment.
Placebo
Not used
Assignment
Parallel
Other design features
Rehabilitation.

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethical committee of Riphah International University
Street address
13-14-C-Civic Center, Near Hamdard Chowk, Township Commercial Area Lahore.
City
Lahore
Postal code
54770
Approval date
2019-07-16, 1398/04/25
Ethics committee reference number
RCRS&AHS/REC/MS-OMPT/S19/002

Health conditions studied

1

Description of health condition studied
Anterior Innominate Iliosacral Dysfunction.
ICD-10 code
M53.88
ICD-10 code description
Other specified dorsopathies, sacral and sacrococcygeal region

Primary outcomes

1

Description
Pain
Timepoint
Before intervention and 6 weeks after intervention
Method of measurement
Numeric Pain Rating Scale (NPRS)

2

Description
Functional Disability
Timepoint
Before intervention and 6 weeks after intervention.
Method of measurement
Modified Oswestry Disability Index (MODI)

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group A will receive Mulligan's mobilization with movement. 3 sets of 10 MWM according to PILL and

CROOKS principal

Category

Treatment - Other

2

Description

Intervention group B will receive Muscle Energy Technique 3 sets of MET's Post isometric relaxation technique

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Lifeline Hospital

Full name of responsible person

Muhammad Salman Bashir

Street address

Building # 462, 463, Khokhar Chowk Block G 3 Phase 2 Johar Town,, Lahore.

City

Lahore

Postal code

54000

Phone

+92 42 35445684

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chistisalman@yahoo.com

2

Recruitment center

Name of recruitment center

Fatima Memorial Hospital

Full name of responsible person

Dr. Farhia Shah

Street address

Main Shadman Road, Ichhra Lahore.

City

Lahore

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Email

farhia@gmail.com

Web page address

http://www.fmsystem.org/

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Riphah International University

Full name of responsible person

Muhammad Salman Bashir

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Web page address

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Grant name

N/A

Grant code / Reference number

N/A

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

Yes

Title of funding source

Riphah International University

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

Riphah International University

Full name of responsible person

Muhammad Salman Bashir

Position

Student

Latest degree

Bachelor

Other areas of specialty/work

Physiotherapy

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Person responsible for scientific inquiries

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Position
Associate professor

Latest degree
Ph.D.

Other areas of specialty/work
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Other areas of specialty/work
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Sharing plan

Deidentified Individual Participant Data Set (IPD)
No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD
There is no further information"

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