

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Effects of Muscle Energy Technique with and without sacroiliac belt on pain, muscle strength and quality of life in patients with sacroiliac joint dysfunction - A randomized clinical trial

Protocol summary

Study aim

To assess the influence of muscle energy technique with and without the application of a sacroiliac belt on pain levels, muscle strength, and the overall quality of life in individuals with sacroiliac joint dysfunction.

Design

In an upcoming nine-month randomized control trial at Begum Akhtar Rukhsana Memorial Welfare Trust Hospital in Lahore, 48 participants will be conveniently sampled.

Settings and conduct

Setting: Begum Akhtar Rukhsana Memorial trust Hospital, Lahore. Participants in the trial will be blinded, unaware of their group assignments or the nature of interventions, to minimize potential biases in behavior and reporting.

Participants/Inclusion and exclusion criteria

Inclusion Criteria: Participants aged 30 to 50 years of both genders; Individuals with persistent pain in the lower back, gluteal, and groin regions, and lower extremity pain lasting between four weeks and one year; Participants testing positive on pain provocation tests. Exclusion Criteria: Pregnant females; Individuals with health issues hindering exercise, such as SLE, Multiple Sclerosis, and Chronic Fatigue Syndrome; Those with osteoporosis affecting the pelvic and spine region, inflammatory pathologies (Ankylosing Spondylitis, Osteoarthritis Hip, Degenerative Arthritis), a history of hip fracture, or any spinal surgery.

Intervention groups

The study will allocate participants into experimental (MET with SI Belt) and control (MET only) groups,

Main outcome variables

SF-36, NPRS, and MMT to assess quality of life, pain, and muscle strength, respectively.

General information

Reason for update

To update information

Acronym

IRCT registration information

IRCT registration number: **IRCT20220930056062N2**

Registration date: **2023-11-22, 1402/09/01**

Registration timing: **prospective**

Last update: **2023-12-03, 1402/09/12**

Update count: **1**

Registration date

2023-11-22, 1402/09/01

Registrant information

Name

Kaiynat Shafique

Name of organization / entity

The University of Faisalabad

Country

Pakistan

Phone

+92 334 6925051

Email address

kaiynatshafique@yahoo.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-11-25, 1402/09/04

Expected recruitment end date

2024-01-15, 1402/10/25

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effects of Muscle Energy Technique with and without sacroiliac belt on pain, muscle strength and quality of life in patients with sacroiliac joint dysfunction - A randomized clinical trial

Public title

Effects of Muscle Energy Technique with and without sacroiliac belt on pain, muscle strength and quality of life in patients with sacroiliac joint dysfunction - A randomized clinical trial

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

participants aged between thirty and fifty years. Both genders Individuals with persistent pain in the lower back, gluteal, and groin regions Participants experienced lower extremity pain for more than four weeks but less than a year individuals who tested positive on pain provocation tests

Exclusion criteria:

Pregnant females Patients facing health issues hindering exercise, such as Systemic Lupus Erythematosus (SLE), Multiple Sclerosis, and Chronic Fatigue Syndrome Individuals with osteoporosis affecting the pelvic and spine region Patients with inflammatory pathologies, including Ankylosing Spondylitis, Osteoarthritis Hip, and Degenerative Arthritis Those with a history of hip fracture or any spinal surgery

Age

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

Gender

Both

Phase

N/A

Groups that have been masked

- Participant

Sample size

Target sample size: **24**

Randomization (investigator's opinion)

Randomized

Randomization description

Patients who met the specified selection criteria were allocated into two distinct groups, denoted as group A and group B. The allocation process was executed through a randomization method, employing the lottery approach to ensure a fair and unbiased distribution among the groups. This random division was implemented to minimize potential biases and enhance the validity of the study results

Blinding (investigator's opinion)

Single blinded

Blinding description

Blinding procedure were meticulously employed in the study to eliminate biases. Participants were kept uninformed about their group assignments (single-blind)

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

University of Lahore

Street address

KM Defence Road, Lahore

City

Lahore

Postal code

54000

Approval date

2023-11-15, 1402/08/24

Ethics committee reference number

20759

Health conditions studied**1****Description of health condition studied**

Sacroiliitis

ICD-10 code

M46.1

ICD-10 code description

Sacroiliitis, not elsewhere classified

Primary outcomes**1****Description**

Pain

Timepoint

Before intervention and after 4 weeks

Method of measurement

NPRS

2**Description**

Strength

Timepoint

Before intervention and after 4 weeks

Method of measurement

MMT

3**Description**

Quality of life

Timepoint

Before intervention and after 4 weeks

Method of measurement

SF-36

Secondary outcomes

empty

Intervention groups**1****Description**

Intervention group: Group A will slated to undergo Muscle Energy Technique (MET) coupled with a sacroiliac (SI) Bel

Category

Rehabilitation

2**Description**

Control group: Group B will exclusively receive MET.

Category

Rehabilitation

Recruitment centers**1****Recruitment center****Name of recruitment center**

Begum Akhtar Rukhsana Memorial welfare trust Hospital, Lahore.

Full name of responsible person

Gulraiz Enderyas

Street address

Lahore

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+92 300 8573142

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gulraizpt@gmail.com

Web page address**Sponsors / Funding sources****1****Sponsor****Name of organization / entity**

University of Lahore

Full name of responsible person

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Grant name

No funding was received

Grant code / Reference number

No funding was received

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

No

Title of funding source

No funding was received

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**

University of Lahore

Full name of responsible person

Gulraiz Enderyas

Position

Physiotherapist

Latest degree

Master

Other areas of specialty/work

Physiotherapy

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Person responsible for scientific inquiries**Contact****Name of organization / entity**

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Position

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Person responsible for updating data

Contact

Name of organization / entity

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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

No - There is not a plan to make this available

Clinical Study Report

Not applicable

Analytic Code

Not applicable

Data Dictionary

Not applicable