Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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 Erythematous (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
City
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Postal code
54000
Phone
+92 300 8573142
Email
gulraizpt@gmail.com
Web page address

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
University of Lahore
Full name of responsible person
Gulraiz Enderyas
Street address
KM Defence Road, Lahore
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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 updating data

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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