

Clinical Trial Protocol

Iranian Registry of Clinical Trials

09 Jun 2026

COMPARISON OF MANIPULATION AND MULLIGAN MOBILIZATION IN PATIENTS WITH SACROILIAC JOINT DYSFUNCTION

Protocol summary

Study aim

The comparison of Manipulation with Mulligan Mobilization on sacroiliac joint dysfunction, disability and range of motion

Design

This study was a double blinded Randomized Clinical Trial. The patients and outcome assessor were blinded about the allocation of the groups.

Settings and conduct

The study was conducted in Evercare Hospital Lahore, outpatient department of physiotherapy.

Participants/Inclusion and exclusion criteria

INCLUSION CRITERIA: • Patients with sacroiliac joint dysfunction. Screened through provocative sacroiliac joint tests: Distraction test Thigh thrust test Compression test Sacral thrust test FABER test Gaenslen test • Age limit of 20y to 60years • Both male and female, were included in this study. **EXCLUSION CRITERIA:** • Recent surgical procedure of Lumbar spine • Spondylolisthesis • Lumbar hypermobility • Sacroiliac joint hypermobility • Spinal structural deformity i.e., scoliosis • Severe cardiovascular and bone diseases i.e. tumor

Intervention groups

Patients were randomly distributed to two groups with use of lottery method of randomization. Group A: Patients treating with sacroiliac joint Manipulation, core stability exercises and heating pad. Group B: Patients treating with Mulligan Mobilization, core stability exercises and heating pad.

Main outcome variables

• Numeric pain rating scale (NPRS) • Modified Oswestry disability Questionnaire (MODQ)

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20210304050573N1**

Registration date: **2021-12-29, 1400/10/08**

Registration timing: **retrospective**

Last update: **2021-12-29, 1400/10/08**

Update count: **0**

Registration date

2021-12-29, 1400/10/08

Registrant information

Name

Idrees Ahmed Zahoor

Name of organization / entity

Riphah International University

Country

Pakistan

Phone

+92 42 32152273

Email address

idrees911310@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-07-01, 1399/04/11

Expected recruitment end date

2020-09-30, 1399/07/09

Actual recruitment start date

2020-07-01, 1399/04/11

Actual recruitment end date

2020-10-31, 1399/08/10

Trial completion date

2020-12-31, 1399/10/11

Scientific title

COMPARISON OF MANIPULATION AND MULLIGAN MOBILIZATION IN PATIENTS WITH SACROILIAC JOINT DYSFUNCTION

Public title

COMPARISON OF MANIPULATION AND MULLIGAN MOBILIZATION IN PATIENTS WITH SACROILIAC JOINT DYSFUNCTION

Purpose

Health service research

Inclusion/Exclusion criteria

Inclusion criteria:

• Patients with sacroiliac joint dysfunction. Screened through provocative sacroiliac joint tests: □ Distraction test □ Thigh thrust test □ Compression test □ Sacral thrust test □ FABER test □ Gaenslen test

Exclusion criteria:

Recent surgical procedure of Lumbar spine
Spondylolisthesis Lumbar hypermobility Sacroiliac joint hypermobility Spinal structural deformity i.e., scoliosis
Severe cardiovascular and bone diseases i.e., tumor

Age

From **20 years** old to **60 years** old

Gender

Both

Phase

1

Groups that have been masked

- Participant
- Outcome assessor

Sample size

Target sample size: **20**

More than 1 sample in each individual

Number of samples in each individual: **3**

pre-treatment, post-treatment and after 2 weeks

Actual sample size reached: **20**

More than 1 sample in each individual

Actual sample size in each individual: **3**

pre-treatment, post-treatment and after 2 weeks

Randomization (investigator's opinion)

Randomized

Randomization description

To collect the data non-probability convenience sampling technique was used but all patients were randomly assigned one of two treatment groups by lottery method during research. Patients were randomly distributed to two groups with use of lottery method of randomization. Group A: Patients treating with sacroiliac joint Manipulation, core stability exercises and heating pad. Group B: Patients treating with Mulligan Mobilization, core stability exercises and heating pad.

Blinding (investigator's opinion)

Double blinded

Blinding description

This study was a double blinded Randomized Clinical Trial. The patients and outcome assessor were blinded about the allocation of the groups. while the physiotherapist were not blinded.

Placebo

Not used

Assignment

Single

Other design features

Randomized Clinical Trial

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Riphah College of Rehabilitation & Allied Health Sciences

Street address

28-M, Quaid-e-Azam, Industrial Estate, Kot Lakhpat, Lahore, Punjab, Pakistan.

City

Lahore

Postal code

54000

Approval date

2020-03-27, 1399/01/08

Ethics committee reference number

REC/RCRS/20/1053

Health conditions studied

1

Description of health condition studied

SACROILIAC JOINT DYSFUNCTION

ICD-10 code

SACROILIAC

ICD-10 code description

SACROILIAC JOINT DYSFUNCTION

Primary outcomes

1

Description

Pain & Disability

Timepoint

pre-treatment, post-treatment

Method of measurement

• Numeric pain rating scale (NPRS), • Modified Oswestry disability Questionnaire (MODQ)

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Patients treating with sacroiliac joint Manipulation, core stability exercises and heating pad.

Category

Rehabilitation

2

Description

Intervention group: Patients treating with Mulligan Mobilization, core stability exercises and heating pad.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Evercare Hospital Lahore, outpatient department of physiotherapy.

Full name of responsible person

Dr. Sajid Mehmood

Street address

D1 Commercial, NECHS, Lahore

City

Lahore

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drmsajidphy@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Riphah International University Islamabad

Full name of responsible person

Idrees Ahmed Zahoor

Street address

28-M, Quaid-e-Azam, Industrial Estate, Kot Lakhpat, Lahore, Punjab, Pakistan.

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Web page address

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Riphah International University Islamabad

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 Islamabad

Full name of responsible person

Dr. Muhammad Hassim

Position

Assistant Professor

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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Full name of responsible person

Idrees Ahmed Zahoor

Position

Senior Lecture

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Person responsible for updating data

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Position

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Web page address

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

Yes - There is a plan to make this available

Analytic Code

Yes - There is a plan to make this available

Data Dictionary

Yes - There is a plan to make this available

Title and more details about the data/document

By publication of research

When the data will become available and for how long

After publication it will be available

To whom data/document is available

Researcher

Under which criteria data/document could be used

For research and evidence base practice

From where data/document is obtainable

University

What processes are involved for a request to access data/document

E-mail

Comments