Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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

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Pakistan

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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
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Lahore
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54000
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Riphah International University Islamabad
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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

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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 prectice

From where data/document is obtainable
University

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

Comments