

Clinical Trial Protocol

Iranian Registry of Clinical Trials

11 Sep 2026

Effects of the suboccipital muscle inhibition technique on pain, functional disability, and quality of life in patients with sacroiliac joint pain

Protocol summary

Study aim

To determine effects of the sub occipital muscle inhibition technique on pain, functional disability, and quality of life in patients with sacroiliac joint pain.

Design

It will be randomized controlled trial

Settings and conduct

The study will be conducted in Fatima memorial hospital – Physical therapy clinic and Pakistan Society Rehabilitation and Disability physiotherapy clinic, Nur International University Rehabilitation clinic.

Participants/Inclusion and exclusion criteria

INCLUSION CRITERIA • Both genders will be included in this study. • Patients between the age of 18 to 25 years. • Sacroiliac pain of chronic level with the duration more than 3months. • Patients with positive Leslett's criteria (The Leslett's criteria consist of 5 pain provocation test names as Compression test, Distraction test, thigh thrust, Gaenslen test and Faber test. According to the criteria out of these five tests, if any of the three test indicates positive findings than it is labelled as sacroiliac pain. • The patient with ODI score between 20-40%. • Patients with NPRS score more than 3 points. **EXCLUSION CRITERIA** • Subjects who had signs of recent surgery • Lumbar spine pathologies like radiculopathies disc herniation, spondylolisthesis, sensory changes in lower back region, osteoporosis • Deformities like torticollis, forward head posture. • Any neurological defect • Any inflammatory or malignant type of pain • Any systemic disease • Pregnancy • Infection • Fractures in the spine

Intervention groups

intervention group will receive conventional treatment and suboccipital inhibition technique (performed for 4min)

Main outcome variables

Numeric pain rating (NPRS) Oswestry Disability Index for disability Health Questionnaire EQ 5D

General information

Reason for update

Trial completed

Acronym

RCT

IRCT registration information

IRCT registration number: **IRCT20190717044238N8**

Registration date: **2023-04-03, 1402/01/14**

Registration timing: **registered_while_recruiting**

Last update: **2023-08-08, 1402/05/17**

Update count: **1**

Registration date

2023-04-03, 1402/01/14

Registrant information

Name

Fareeha Amjad

Name of organization / entity

The University of Lahore

Country

Pakistan

Phone

+92 42 99200600

Email address

fari_fairy22@yahoo.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-02-28, 1401/12/09

Expected recruitment end date

2023-07-30, 1402/05/08

Actual recruitment start date

2023-03-10, 1401/12/19

Actual recruitment end date

2023-08-02, 1402/05/11

Trial completion date

Scientific title

Effects of the suboccipital muscle inhibition technique on pain, functional disability, and quality of life in patients with sacroiliac joint pain

Public title

Physiotherapy effects on SIJ pain

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Both gender Age 18-25 years old Sacroiliac pain of chronic level with the duration more than 3months Patients with positive Leslett's criteria (The Leslett's criteria consist of 5 pain provocation test names as Compression test, Distraction test, thigh thrust, Gaenslen test and Faber test) According to the criteria out of these five tests, if any of the three test indicates positive findings than it is labelled as sacroiliac pain. The patient with ODI score between 20-40%.• Patients with NPRS score more than 3 points.

Exclusion criteria:

Subjects who had signs of recent surgery Lumbar spine pathologies like radiculopathies disc herniation, spondylolisthesis, sensory changes in lower back region, osteoporosis Deformities like torticollis, forward head posture. Any neurological defect Any inflammatory or malignant type of pain Any systemic disease Pregnancy Infection Fractures in the spine

Age

From **18 years** old to **25 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **38**

Actual sample size reached: **38**

Randomization (investigator's opinion)

Randomized

Randomization description

Patients will be randomly assigned into 2 groups using a computer generated random number table. All those random numbers will be enclosed in sealed envelopes. A third person (who will further not be a part of research) will open envelopes and the patient will be allocated to the mentioned group accordingly

Blinding (investigator's opinion)

Single blinded

Blinding description

An independent assessor, who will be a senior and experienced physiotherapist and will not be part of the study, will assess patient.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Research and Ethics Committee

Street address

Riphah International University Lahore, Pakistan

City

Lahore

Postal code

54000

Approval date

2023-01-02, 1401/10/12

Ethics committee reference number

REC/RCR & AHS/23/0104

Health conditions studied

1

Description of health condition studied

Sacroiliac joint pain

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Pain intensity

Timepoint

will be measure on baseline 3 weeks to 6 weeks

Method of measurement

NPRS questionnaire

2

Description

Disability

Timepoint

will be measure on baseline 3 weeks to 6 weeks

Method of measurement

Oswestry Disability Index for disability

3

Description

Quality of life

Timepoint

will be measure on baseline 3 weeks to 6 weeks

Method of measurement

Health Questionnaire EQ 5D

Secondary outcomes

empty

Intervention groups

1

Description

Control group: Group A will receive conventional treatment only which is hot pack for 10 minutes, transcutaneous electrical nerve stimulator (TENS) with 3hz frequency of burst mode for time duration of 10 minutes, therapeutic ultrasound with frequency of 1MHz for a time duration of 5 minutes and muscle energy techniques (2sets, 5reptions, 10 sec hold), will be given to the subject.

Category

Treatment - Other

2

Description

Intervention group: : Group B will receive conventional treatment which is hot pack for 10 minutes, transcutaneous electrical nerve stimulator (TENS) with 3hz frequency of burst mode for time duration of 10 minutes, therapeutic ultrasound with frequency of 1MHz for a time duration of 5 minutes and muscle energy techniques (2sets, 5reptions, 10 sec hold), will be given to the subject and new treatment which is sub occipital inhibition technique (performed for 4min until the tissues and muscles were relaxed. During the procedure, patients were asked to keep their eyes closed to avoid eye movements that affect the sub occipital muscle tone)

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Fatima memorial hospital-Physical therapy clinic,
Pakistan Society Rehabilitation and Disability phy

Full name of responsible person

Dr. Ahmed Jamal

Street address

61 froze purr road Lahore, Pakistan

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

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Full name of responsible person

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Grant name

Grant code / Reference number

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

Fareeha Amjad

Position

Associate Professor

Latest degree

Ph.D.

Other areas of specialty/work

Physiotherapy

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Person responsible for scientific inquiries

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Other areas of specialty/work

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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

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