

Clinical Trial Protocol

Iranian Registry of Clinical Trials

11 Sep 2026

Effects of Strain counterstrain technique with and without dry needling on pain, range of motion, functional disability and quality of life in patients with sacroiliac joint dysfunction

Protocol summary

Study aim

To determine the effects of strain counter-strain technique with and without dry needling on pain, range of motion, functional disability and quality of life in patients with sacroiliac joint dysfunction.

Design

Randomized clinical trial, single blinded study, two parallel groups with 32 patients from Al syed Touqeer Altaf surgical Hospital Lahore

Settings and conduct

The trial will be conducted at Al syed Touqeer Altaf surgical Hospital Lahore.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Patient of age 25-50 years, Both Male and female patients, patient having pain in lower back and buttocks from last 3 months, NPRS score greater than 4. Inclusion criteria: Acute injury or fracture of the lower limb and spine, previous major lumbar or hip surgery, Infection, pregnancy, Congenital spinal deformity, Malignancy

Intervention groups

Group A: Strain counterstrain technique with dry needling will be given to group A along with conventional therapy
Group B: Strain counterstrain technique will be given to group B along with conventional therapy

Main outcome variables

Pain, Range of motion, functional disability, quality of life

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20190717044238N15**

Registration date: **2024-05-18, 1403/02/29**

Registration timing: **registered_while_recruiting**

Last update: **2024-05-18, 1403/02/29**

Update count: **0**

Registration date

2024-05-18, 1403/02/29

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

2024-05-04, 1403/02/15

Expected recruitment end date

2024-07-08, 1403/04/18

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effects of Strain counterstrain technique with and without dry needling on pain, range of motion, functional disability and quality of life in patients with sacroiliac joint dysfunction

Public title

Effects of Strain counterstrain technique with and

without dry needling on pain, range of motion, functional disability and quality of life in patients with sacroiliac joint dysfunction

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Patient of age 25-50 years Both Male and female patients Pain in lower back and buttocks from last 3 months NPRS score greater than 4

Exclusion criteria:

Acute injury or fracture of the lower limb and spine previous major lumbar or hip surgery Infection Congenital spinal deformity Malignancy

Age

From **25 years** old to **50 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Outcome assessor

Sample size

Target sample size: **32**

Randomization (investigator's opinion)

Randomized

Randomization description

The randomization will be done by using computer generated randomizer.

Blinding (investigator's opinion)

Single blinded

Blinding description

This study will be a single blinded study. Assessor will be kept blind about the group allocation and previous readings.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Research and ethics Committee Riphah College of Rehabilitation and Allied Health Sciences

Street address

Riphah International University Gulberg campus lahore

City

Lahore

Postal code

54000

Approval date

2024-04-03, 1403/01/15

Ethics committee reference number

REC/RCR & AHS/23/0191

Health conditions studied

1

Description of health condition studied

SACROILIAC JOINT DYSFUNCTION

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Pain

Timepoint

Before intervention, 4 week

Method of measurement

Numerical pain rating scale

2

Description

Range of motion

Timepoint

Before intervention, 4 week

Method of measurement

Inclinometer

3

Description

Functional disability

Timepoint

Before intervention, 4 week

Method of measurement

Oswestry disability index

4

Description

Quality of life

Timepoint

Before intervention, 4 week

Method of measurement

SF-36

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Group A:Initially group will receive

conventional physical therapy treatment. Strain counterstrain technique will be performed on four muscles including quadratus lumborum, piriformis, iliocostalis and erector spinae. In this technique, therapist will place the patient in a comfortable position for each of the corresponding muscle for 90 seconds to achieve relaxation and then he will return passively to the starting position. The technique will be repeated 3 times in each session. Also dry needling will be performed on the same four muscles by using the injection technique (described by Travel and Simons8).The frequency of treatment will be 3 sessions per week for 4 weeks.

Category

Rehabilitation

2

Description

Intervention group: Group B:Initially group will receive conventional physical therapy treatment .Strain counterstrain technique will performed with same procedure as in group A for same 4 muscles including quadratus lumborum, piriformis, iliocostalis and erector spinae.The frequency of treatment will be 3 sessions per week for 4 weeks.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Al Syed Touqeer Altaf surgical Hospital

Full name of responsible person

Aneeqa mubarik

Street address

Sher shah road shadbagh

City

Lahore

Postal code

54000

Phone

+92 316 4562591

Email

aneeqamubarik123456@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Riphah International University Lahore

Full name of responsible person

Fareeha Amjad

Street address

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54000

Phone

+92 334 3372779

Email

fari_fairy22@yahoo.com

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Riphah International University Lahore

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 Lahore

Full name of responsible person

Aneeqa Mubarik

Position

MS student

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

Fareeha Amjad

Position

Associate Professor

Latest degree

Ph.D.

Other areas of specialty/work

Physiotherapy

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Person responsible for updating data

Contact

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Full name of responsible person

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Latest degree

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Other areas of specialty/work

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

confidentiality of participants

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

No - There is not 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

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

No - There is not a plan to make this available

Title and more details about the data/document

Consent form in its original format with no information about any participant study protocol -how the intervention was given to both groups

When the data will become available and for how long

Data would be available after the completion of the research

To whom data/document is available

People working in an academic and clinical setting can have access to the above mentioned information/documents

Under which criteria data/document could be used

Data can be used for Research Purpose

From where data/document is obtainable

Data can be asked for at the following email address: aneeqamubarik123456@gmail.com@gmail.com

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

One can ask for data at the given email address and it would be provided after knowing the general implications of sharing that particular data

Comments