

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 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, iliacus 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, illiacus 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**

Riphah International University Gulberg campus  
lahore

**City**

Lahore

**Postal code**

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

**Street address**

Hanif Park Badami bagh lahore

**City**

Lahore

**Province**

Punjab

**Postal code**

54000

**Phone**

+92 316 4562591

**Email**

aneeqamubarik123456@gmail.com

**Person responsible for scientific inquiries**

**Contact**

**Name of organization / entity**

Riphah International University Lahore

**Full name of responsible person**

Fareeha Amjad

**Position**

Associate Professor

**Latest degree**

Ph.D.

**Other areas of specialty/work**

Physiotherapy

**Street address**

Riphah International University Gulberg campus  
lahore

**City**

Lahore

**Province**

Punjab

**Postal code**

54000

**Phone**

+92 334 3372779

**Email**

fari\_fairy22@gmail.com

**Person responsible for updating data**

**Contact**

**Name of organization / entity**

Riphah International university Lahore

**Full name of responsible person**

Aneeqa Mubarik

**Position**

Student

**Latest degree**

Master

**Other areas of specialty/work**

Physiotherapy

**Street address**

Riphah International University Gulberg campus  
lahore

**City**

Lahore

**Province**

Punjab

**Postal code**

54000

**Phone**

+92 316 4562591

**Email**

aneeqamubarik123456@gmail.com

**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**