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

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+92 42 99200600

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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 Commitee 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, illiacus 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
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Phone
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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Riphah International University Lahore
Full name of responsible person
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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
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Person responsible for scientific inquiries

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Person responsible for updating data

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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