Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Investigating the Effectiveness of Adding Muscle Energy Technique to Thrust Manipulation on Pain, Disability, and Function in Patients with Sacroiliac Joint Dysfunction

Protocol summary

Study aim
Investigating the Effectiveness of Adding Muscle Energy Technique to Thrust Manipulation on Pain, Disability, and Function in Patients with Sacroiliac Joint Dysfunction

Design
A controlled, parallel-group, single-blind, randomized clinical trial of 48 patients

Settings and conduct
6 treatment sessions are performed in Hazrat Abolfazl clinic. Assessor is blinded to the intervention and control groups.

Participants/Inclusion and exclusion criteria
Inclusion criteria: Age range 18-45 years Having a unilateral disorder of AIR and PIR The direction of the disorder side and the painful side are the same Pain below the fifth lumbar vertebra (L5) and around the PSIS Chronic pain that has lasted for at least 3 months Minimum pain intensity based on VAS should be 30 The minimum degree of disability based on ODI should be 30% Body mass index between 18-28 kg/m2 The positivity of 3 out of 5 iliac crest height tests, the level of PSISs, the level of ASISs, Standing Flexion Test and Gillet's Test, the positivity of Long Sitting Test and the positivity of 3 out of 5 tests Distraction Test, Compression Test, Thigh thrust test, sacral thrust test and Gaenslen's test Exclusion criteria: Radiculopathy Fractures of the spine and lower limbs Lumbosacral surgery Spinal deformity and scoliosis Anatomical leg length difference with a difference of more than 1 cm pregnancy Rheumatoid arthritis and ankylosing spondylitis Malignancies Infection Cardiovascular disease and pacemakers The subject's unwillingness to cooperate in the beginning or continuation of the sessions

Intervention groups
Muscle Energy Technique with Thrust Manipulation and Thrust Manipulation

Main outcome variables
Pain

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20240728062565N2**
Registration date: **2026-02-05, 1404/11/16**
Registration timing: **registered_while_recruiting**

Last update: **2026-02-05, 1404/11/16**
Update count: **0**

Registration date
2026-02-05, 1404/11/16

Registrant information

Name
Majid Rajabian

Name of organization / entity

Country
Iran (Islamic Republic of)

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+98 21 8881 0325

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2026-01-31, 1404/11/11

Expected recruitment end date
2026-07-02, 1405/04/11

Actual recruitment start date
empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Investigating the Effectiveness of Adding Muscle Energy Technique to Thrust Manipulation on Pain, Disability, and Function in Patients with Sacroiliac Joint Dysfunction

Public title

Investigating the Effectiveness of Adding Muscle Energy Technique to Thrust Manipulation in Patients with Sacroiliac Joint Dysfunction

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Age range 18-45 years Having a unilateral disorder of AIR and PIR The direction of the disorder side and the painful side are the same Pain below the fifth lumbar vertebra (L5) and around the PSIS Chronic pain that has lasted for at least 3 months Minimum pain intensity based on VAS should be 30 The minimum degree of disability based on ODI should be 30% Body mass index between 18-28 kg/m2 The positivity of 3 out of 5 iliac crest height tests, the level of PSISs, the level of ASISs, Standing Flexion Test and Gillet's Test, the positivity of Long Sitting Test and the positivity of 3 out of 5 tests Distraction Test, Compression Test, Thigh thrust test, sacral thrust test and Gaenslen's test

Exclusion criteria:

Radiculopathy Fractures of the spine and lower limbs Lumbosacral surgery Spinal deformity and scoliosis Anatomical leg length difference with a difference of more than 1 cm pregnancy Rheumatoid arthritis and ankylosing spondylitis Malignancies Infection Cardiovascular disease and pacemakers The subject's unwillingness to cooperate in the beginning or continuation of the sessions

Age

From **18 years** old to **45 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Outcome assessor

Sample size

Target sample size: **48**

Randomization (investigator's opinion)

Randomized

Randomization description

Simple randomization and quadruple block creation with 1:1 ratio Randomization will be done using randomization.com For the purpose of allocation concealment, sealed and numbered envelopes will be used, which will be provided to the participant by the secretary

Blinding (investigator's opinion)

Single blinded

Blinding description

Assessor is blinded to type of intervention and group of patient

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Baqiyatallah University of Medical Sciences

Street address

No. 31, osali Alley, Rezaei Ave., West Abouzar St

City

Tehran

Province

Tehran

Postal code

1363736766

Approval date

2026-01-18, 1404/10/28

Ethics committee reference number

IR.BMSU.REC.1404.172

Health conditions studied

1

Description of health condition studied

Sacroiliac Joint Dysfunction

ICD-10 code

S33.6

ICD-10 code description

Sprain of sacroiliac joint

Primary outcomes

1

Description

Pain: To measure the pain of patients, a 100 mm long ruler known as Visual Analogue Scale will be used, with the word "no pain" at one end and the word "maximum pain" at the other end. In this study, people who have pain of at least 30 will be included in the study.

Timepoint

Before the start of the intervention, after the 6th intervention session and one month after the last intervention session

Method of measurement

Visual Analogue Scale

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Muscle Energy Technique with Thrust Manipulation
Category
Rehabilitation

2

Description
Control group: Thrust Manipulation
Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
Hazrat abolfazl clinic
Full name of responsible person
Vahid Sobhani
Street address
6/39 Ave., 30 Metri Nirou Havaei
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Bagheiat-allah University of Medical Sciences
Full name of responsible person
Reza Kachuei
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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
Bagheiat-allah University of Medical Sciences
Proportion provided by this source
100
Public or private sector
Public
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
Bagheiat-allah University of Medical Sciences
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Latest degree
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Person responsible for updating data

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Position
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Other areas of specialty/work
Physiotherapy

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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