

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

09 Jun 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/m<sup>2</sup> 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)

##### Phone

+98 21 8881 0325

##### Email address

mrajabian@razi.tums.ac.ir

##### Recruitment status

**recruiting**

##### 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/m<sup>2</sup> 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

#### City

Tehran

#### Province

Tehran

#### Postal code

1363736766

#### Phone

+98 21 7748 1101

#### Email

mrjabian19@gmail.com

## Sponsors / Funding sources

1

### Sponsor

#### Name of organization / entity

Bagheiat-allah University of Medical Sciences

#### Full name of responsible person

Reza Kachuei

#### Street address

Sheykh Bahayi Ave., Vanak

#### City

Tehran

#### Province

Tehran

#### Postal code

1363736766

#### Phone

+98 21 8755 4574

### Email

Kachueiz@yahoo.com

### 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

#### Full name of responsible person

Vahid Sobhani

#### Position

Professor

#### Latest degree

Specialist

#### Other areas of specialty/work

Sport Medicine

#### Street address

Sheykh Bahayi Ave., Vanak

#### City

Tehran

#### Province

Tehran

#### Postal code

1363736766

#### Phone

+98 21 8248 2407

#### Email

Sobhani518@gmail.com

## Person responsible for scientific inquiries

### Contact

#### Name of organization / entity

Bagheiat-allah University of Medical Sciences

#### Full name of responsible person

Vahid Sobhani

#### Position

Professor

#### Latest degree

Specialist

#### Other areas of specialty/work

Sport Medicine

#### Street address

Sheykh Bahayi Ave., Vanak

**City**

Tehran

**Province**

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**Postal code**

1363736766

**Phone**

+98 21 8248 2407

**Email**

Sobhani518@gmail.com

**Person responsible for updating data**

**Contact**

**Name of organization / entity**

Bagheiat-allah University of Medical Sciences

**Full name of responsible person**

Majid Rajabian

**Position**

MSc

**Latest degree**

Master

**Other areas of specialty/work**

Physiotherapy

**Street address**

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

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**Province**

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**Postal code**

1363736766

**Phone**

+98 21 8881 0325

**Email**

mrjabian19@gmail.com

**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