Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Evaluating the impacts of releasing the stiffness of hip adductor muscles on sacroiliac joint pain: a randomized clinical trial.

Protocol summary

Study aim

In our clinical experience, we have encountered numerous cases of sacroiliac joint pain, which also showed tightness of the hip adductor muscle . To answer the question of whether the release of the hip adductor muscles improves the treatment of sacroiliac joint pain, scientific sources were searched but no article was found in this field.

Design

A clinical trial with a control group, with parallel, non-blind, randomized with simple randomized groups on 40 patients

Settings and conduct

40 patients referred to the sports medicine department of Taleghani Hospital, with low back pain, who diagnosed sacroiliac joint pain and in the simultaneous examination of hip adductor muscle tightness are observed into two groups: A) Standard treatment of sacroiliac joint pain and release of hip adductor muscles and B) Standard treatment for sacroiliac joint pain will be divided. At the end of the treatment, the rate of change in sacroiliac joint pain in the two groups will be compared.

Participants/Inclusion and exclusion criteria

The sample size will be 40 people (20 people in group A , 20 people in group B). Inclusion criteria: 1-Low back pain less than 3 months 2- Sacroiliac joint disorder 3- Age 18-60 years Exclusion criteria: 1-Any contraindication for manual therapy

Intervention groups

People in 2 groups: A) Standard treatment of sacroiliac joint pain (including: daily heat therapy, needling painful areas (2 sessions per week), daily sacroiliac joint mobilization exercises) and release of hip adductor muscles and B) Standard treatment for sacroiliac joint pain will be divided.

Main outcome variables

At the beginning of each session and at the end of the treatment period, patients are evaluated for tenderness and sacroiliac joint pain and tenderness and stiffness of hip adductors. Quality of life is assessed by an Oswestry questionnaire at the beginning and end of treatment.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20201216049730N1**
Registration date: **2021-02-19, 1399/12/01**
Registration timing: **registered_while_recruiting**

Last update: **2021-02-19, 1399/12/01**
Update count: **0**

Registration date

2021-02-19, 1399/12/01

Registrant information

Name

Mohammad Hassabi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 21 8869 2273

Email address

hassabi@sbmu.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-01-20, 1399/11/01

Expected recruitment end date

2021-07-23, 1400/05/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date
empty

Scientific title
Evaluating the impacts of releasing the stiffness of hip adductor muscles on sacroiliac joint pain: a randomized clinical trial.

Public title
The impacts of releasing the stiffness of hip adductor muscles on sacroiliac joint pain

Purpose
Treatment

Inclusion/Exclusion criteria

Inclusion criteria:
People with low back pain less than 3 months Diagnosis of sacroiliac joint disorder (3 or more positive test) Equal true and functional length of lower limb (functional length: distance between umbilicus to distal of medial ankle, true length: distance between anterior superior iliac spine to distal of medial ankle) No history of severe trauma to the spine, pelvis, lower limbs, abdomen and chest during the last 12 months No history of spine, pelvic, lower limb, abdomen and chest surgery during the last 12 months Absence of localized lesion of the spine including tumor, infection and fracture Absence of known congenital pelvic and spinal disorders that restrict movement or impair examination Absence of known systemic arthropathy Absence of neuropathy Absence of metabolic disorders Absence of symptoms or evidence of radiculopathy Absence of pregnancy No history of receiving any treatment for sacroiliac joint pain in the last 3 months Women should not be in the first six months after delivery Women should not be post menopausal

Exclusion criteria:
Any musculoskeletal disorder of the lower extremities that interferes with movement or examination

Age
From **18 years** old to **60 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **40**

Randomization (investigator's opinion)
Randomized

Randomization description
Study subjects are divided into two groups in a simple randomization with a ratio of one to one. In group A the stiffness of hip adductor muscles will be released in addition to the standard treatment of sacroiliac joint pain but group B will only receive the standard treatment of sacroiliac joint pain. The grouping will be written on pieces of paper, sealed in envelopes, and then given to the secretary. The secretary will randomly give one of the envelopes to the patient. The therapist will assign each patient to group A or B depending on the group written in the patient's envelope.

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ethics Committee of Shahid Beheshti University of Medical Sciences

Street address
Shahid Beheshti University of Medical Sciences, Arabi Ave., Yemen St., Tehran, Tehran Province

City
Tehran

Province
Tehran

Postal code
1983969411

Approval date
2020-12-12, 1399/09/22

Ethics committee reference number
IR.SBMU.RETECH.REC.1399.783

Health conditions studied

1

Description of health condition studied
Sacroiliac joint pain and dysfunction: Painful touching of the sacroiliac joint and the positive test of 3 or more of the 6 tests diagnoses sacroiliac joint pain and dysfunction.

ICD-10 code

ICD-10 code description

2

Description of health condition studied
Hip adductor muscles: include Adductor Longus, Adductor Brevis, and Adductor Magnus. In this study, Adductor longus muscle is examined. Diagnosis of hip adductor disorder can be made by two imaging techniques, including ultrasound or MRI or clinical examination.

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description
Sacroiliac joint pain
Timepoint
Before starting treatment, at the beginning of each treatment session, at the end of 4 treatment sessions
Method of measurement
The patient is asked and recorded as 0 (painless) to 10 (worst possible pain) by the visual analog scale (VAS).

2

Description
Sacroiliac joint tenderness
Timepoint
Before starting treatment, at the beginning of each treatment session, at the end of 4 treatment sessions
Method of measurement
Touch the sacroiliac joint to check for tenderness. Recording of tenderness information by a specialist doctor is done as follows: 1- No pain 2- Mild tenderness (causing pain with deep touch) 3- Moderate tenderness (causing pain with superficial touch) 4- Severe tenderness (severe reaction of the patient with superficial touch).

Secondary outcomes

1

Description
Quality of Life
Timepoint
Before starting treatment, at the end of 4 sessions of treatment
Method of measurement
Oswestry questionnaire

2

Description
Adductor muscle tenderness
Timepoint
Before starting treatment, at the beginning of each treatment session, at the end of 4 treatment sessions
Method of measurement
Touch the junction of the adductor longus muscle to check for tenderness. Tenderness is recorded by a sports medicine specialist as 1- painless 2- mild tenderness (causing pain with deep touch) 3- moderate tenderness (causing pain with superficial touch) 4- severe tenderness (severe reaction of the patient with superficial touch).

3

Description
Stiffness of adductor muscles
Timepoint
Before starting treatment, at the beginning of each treatment session, at the end of 4 treatment sessions
Method of measurement
Touch the length of the adductor longus muscle to check muscle stiffness. Stiffness is recorded by a sports medicine specialist in the form of 1- usual consistency 2- touch of stiffness 3- clear protrusion.

Intervention groups

1

Description
Intervention group: Group A, in addition to the standard treatment of sacroiliac joint pain, hip adductor muscles will be released. Duration of treatment: 4 sessions by the therapist (2 sessions per week) with daily exercises at home. Treatment of sacroiliac joint pain includes heat therapy for 5 minutes (daily), needling painful areas (2 sessions per week), sacroiliac joint mobilization exercises, each exercise 3 sets of 10 repetition, daily. Release of hip adductors including heat therapy for 5 minutes (daily), manual therapy (using friction massage and ischemic pressure) for 5 minutes (2 sessions per week), use of vibrator for 5 minutes (2 sessions per week), adductor stretching 30 seconds to the maximum range of motion whit out Pain, 3 repetitions, daily
Category
Treatment - Devices

2

Description
Control group: Intervention group: Group B who will receive standard treatment for sacroiliac joint pain. Duration of treatment: 4 sessions by the therapist (2 sessions per week) with daily exercises at home. Treatment of sacroiliac joint pain includes heat therapy for 5 minutes (daily), needling painful areas (2 sessions per week), sacroiliac joint mobilization exercises, each exercise 3 sets of 10 repetition, daily.
Category
Treatment - Devices

Recruitment centers

1

Recruitment center
Name of recruitment center
Ayatollah Taleghani Hospital
Full name of responsible person
Mohammad Hassabi
Street address
Ayatollah Taleghani Hospital, Arabi Ave., Yemen St., Tehran
City
Tehran
Province
Tehran
Postal code
1985711151
Phone
+98 21 2243 2560
Email

hassabi@sbmu.ac.ir

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Shahid Beheshti University of Medical Sciences
Full name of responsible person
Taleghani Hospital Development and Clinical Research Unit
Street address
Ayatollah Taleghani Hospital, Arabi Ave., Yemen Blvd., Tehran
City
Tehran
Province
Tehran
Postal code
1985711151
Phone
+98 21 2243 2560
Email
hassabi@sbmu.ac.ir
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Shahid Beheshti 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
Shahid Beheshti University of Medical Sciences
Full name of responsible person
Seyedeh Sara Shams
Position
Specialized Resident in Sports Medicine
Latest degree
Medical doctor
Other areas of specialty/work
Sport Medicine
Street address
Ayatollah Taleghani Hospital, Arabi Ave., Yemen Blvd., Tehran
City
Tehran
Province
Tehran
Postal code
1985711151
Phone
+98 21 2243 2560
Email
sarashams6990@gmail.com

Person responsible for scientific inquiries

Contact
Name of organization / entity
Shahid Beheshti University of Medical Sciences
Full name of responsible person
Mohammad Hassabi
Position
Assistant Professor
Latest degree
Specialist
Other areas of specialty/work
Sport Medicine
Street address
Ayatollah Taleghani Hospital, Arabi Ave., Yemen Blvd., Tehran
City
Tehran
Province
Tehran
Postal code
1985711151
Phone
+98 21 2243 2560
Email
hassabi@sbmu.ac.ir

Person responsible for updating data

Contact
Name of organization / entity
Shahid Beheshti University of Medical Sciences
Full name of responsible person
Seyedeh Sara Shams
Position
Specialized Resident in Sports Medicine
Latest degree
Medical doctor
Other areas of specialty/work
Sport Medicine
Street address
Ayatollah Taleghani Hospital, Arabi Ave., Yemen Blvd., Tehran
City
Tehran
Province
Tehran
Postal code
1985711151
Phone
+98 21 2243 2560
Email

sarashams6990@gmail.com

Sharing plan

Deidentified Individual Participant Data Set (IPD)
Yes - There is a plan to make this available
Study Protocol
Yes - There is a plan to make this available
Statistical Analysis Plan
Yes - There is 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
Yes - There is a plan to make this available
Data Dictionary
Yes - There is a plan to make this available
Title and more details about the data/document
All potential data is shared in the form of an article after unidentifiable individuals
When the data will become available and for how long
Accessed since 2022
To whom data/document is available
Researchers working in academic and scientific institutions
Under which criteria data/document could be used
No analysis is allowed on the data
From where data/document is obtainable
sarashams@gmail.com
What processes are involved for a request to access data/document
To access the data, individuals must send a request to the inserted email and after receiving the necessary checks and if they are eligible, they will receive the requested data within a month.
Comments