

Clinical Trial Protocol

Iranian Registry of Clinical Trials

17 Sep 2026

Efficacy of Postural Restoration exercises on pain, ROM and disability of the patients with chronic non-specific low back pain

Protocol summary

Study aim

1. Comparing the intensity of pain between groups 2. Comparing the amount of disability between groups using Oswestry disability questionnaire 3. Comparing passive hip adduction, abduction, internal rotation and external rotation ROM between groups 4. Comparing passive shoulder internal and external rotation ROM between groups 5. Comparing Gleno-humeral internal rotation deficiency(GIRD) between groups 6. Assessment of relation between hip and contralateral shoulder ROM between groups

Design

Single blinded randomized controlled trial, pre-test post-test design. with block Randomization method in 18 patients with chronic non-specific low back pain

Settings and conduct

The process has been performed in a private clinic. Patients were allocated into control and intervention groups and randomized by block randomization method. After meeting the inclusion criteria, patients were evaluated at first session and sixth session. Patients in the treatment group were asked to perform five Postural restoration exercises and patients in the control group were asked to perform five routine exercises. The process lasted 5 sessions and patients were reevaluated in the sixth session.

Participants/Inclusion and exclusion criteria

1. Patients who had positive Ober`s test on one side indicating pelvic girdle malalignment, and limited contralateral shoulder internal rotation ROM. 2. Patients who didn`t have specific spine pathology like spondylolisthesis, canal stenosis, fracture and infection. 3. At least 3 months had passed from the first episode of low back pain. 4. Patients who didn`t have any neurologic sign and symptoms like radicular pain, numbness and paresthesia

Intervention groups

Control group: Routine physiotherapy exercise for low back pain Intervention group: Postural restoration

exercise

Main outcome variables

Pain Disability(Oswestry disability questionnaire) Hip ROM Shoulder ROM

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20201230049883N1**

Registration date: **2021-01-18, 1399/10/29**

Registration timing: **retrospective**

Last update: **2021-01-18, 1399/10/29**

Update count: **0**

Registration date

2021-01-18, 1399/10/29

Registrant information

Name

Mehran Fathizadeh

Name of organization / entity

Country

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m3hran.fathi@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-07-01, 1398/04/10

Expected recruitment end date

2020-05-19, 1399/02/30

Actual recruitment start date

2019-07-01, 1398/04/10

Actual recruitment end date

2020-02-20, 1398/12/01

Trial completion date

2020-02-20, 1398/12/01

Scientific title

Efficacy of Postural Restoration exercises on pain, ROM and disability of the patients with chronic non-specific low back pain

Public title

Efficacy of Postural Restoration exercises on patients with chronic non-specific low back pain

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Patients with pelvic malalignment determined by Ober`s test Patients with chronic low back pain who has lasted at least 3 months Patients who don`t have specific pathology causing low back pain like tumors, fractures, infection, spondylolisthesis, canal stenosis Patients who don`t have previous surgery BMI less than 30 Patients who don`t have neurologic sign and symptoms like radicular pain or numbness in lower extremities Patients who are not drug addicted Patients who are not suffering from mental disorders Patients who are not pregnant Patients who don`t have neurological disease like MS or CVA Patients who don`t have rheumatologic disease

Exclusion criteria:

Inability of the patients to learn the exercises Bilateral positive Ober`s test Using pain killers

AgeFrom **20 years** old to **45 years** old**Gender**

Both

Phase

N/A

Groups that have been masked

- Participant

Sample sizeTarget sample size: **16**Actual sample size reached: **18****Randomization (investigator's opinion)**

Randomized

Randomization description

By the use of software, block randomization method was used. There were 5 blocks and patients equally devoted to both control(A) and intervention(B) groups at each block.

Blinding (investigator's opinion)

Single blinded

Blinding description

Patients were blind to the group(control/intervention) that they were in.

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Ethics committee of university of social welfare and rehabilitation sciences

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Koodakyar Ave, Daneshjoo Blv, Evin, Tehran, Iran

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Approval date

2019-06-26, 1398/04/05

Ethics committee reference number

IR.USWR.REC.1398.034

Health conditions studied**1****Description of health condition studied**

Chronic non-specific low back pain

ICD-10 code

M54.5

ICD-10 code description

Low back pain

Primary outcomes**1****Description**

Intensity of pain

Timepoint

Before intervention and 12 days later

Method of measurement

Visual analog scale

2**Description**

Hip internal and external ROM

Timepoint

Before intervention and 12 days later

Method of measurement

Standard goniometer

3**Description**

Hip abduction and adduction ROM

Timepoint

Before intervention and 12 days later

Method of measurement

Inclinometer

4

Description

Score of disability in Oswestry disability questionnaire

Timepoint

Before intervention and 12 days later

Method of measurement

Oswestry disability questionnaire

Secondary outcomes

1

Description

Shoulder internal and external rotation ROM

Timepoint

Before intervention and 12 days later

Method of measurement

Standard Goniometer

Intervention groups

1

Description

Intervention group: Postural restoration exercises

Category

Treatment - Other

2

Description

Control group: Routine physiotherapy exercises for low back pain

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Private Clinic (Dayani_physio_clinic)

Full name of responsible person

Mohammad Reza Dayani

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Unit 8, No 193, Mollasadra street, Tehran, Iran

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

University of social welfare and rehabilitation sciences

Full name of responsible person

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Web page address

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

University of social welfare and rehabilitation 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

University of social welfare and rehabilitation sciences

Full name of responsible person

Mehran Fathizadeh

Position

Researcher

Latest degree

Master

Other areas of specialty/work

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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

No - There is not a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Not applicable

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available

Title and more details about the data/document

Collected clinical data

When the data will become available and for how long

Immediately after article publishing

To whom data/document is available

All interested people

Under which criteria data/document could be used

To get more details of collected data

From where data/document is obtainable

contact via : m3hran.fathi@gmail.com

What processes are involved for a request to access data/document

NO special process. IT may take about 2 weeks from contacting via E-mail

Comments