Clinical Trial Protocol
Iranian Registry of Clinical Trials

09 Jun 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 pasted 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

Iran (Islamic Republic of)

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+98 21 6609 8062

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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
Age
From **20 years** old to **45 years** old
Gender
Both

Phase
N/A
Groups that have been masked

- Participant

Sample size
Target 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
Street address
Koodakyar Ave, Daneshjoo Blv, Evin, Tehran, Iran
City
Tehran
Province
Tehran
Postal code
1985713834
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
Hamidreza Khorram Khorshid
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Koodakyar, Daneshjoo Blv, Evin , Tehran
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1985713834
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Email
webmaster@uswr.ac.ir
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
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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