Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

Effect of Yoga Exercises on Spinal Flexibility, Pain and Functional Disability in Women with Chronic Lumbar Disk Herniation: A Randomized Controlled Trial study

Protocol summary

Summary

The purpose of this study was to investigate the effect of Yoga exercises on spinal flexibility, pain and functional disability in women with chronic lumbar disk herniation. This randomized controlled trial was performed in Zahedan University of Medical Sciences, in 2010. Twenty-eight patients with chronic lumbar disk herniation were participated through simple non probability sampling. Patients were selected based on following inclusion criteria: Radicular low back pain for a period of at least 3 months, participants aged over 18 and less than 80 years old, appropriateness of exercise in accordance with clinical assessment, patients who have not been contraindicated from doing exercise based on Physical Activity Readiness Questionnaire, participants diagnosed with lumbar disc herniation by specialist and radiography. Patients were excluded if they had suspected or confirmed for serious spinal pathology, suspected or confirmed for pregnancy, spinal column surgery, insufficient treatment, using other therapeutic modalities during the study. Subjects were randomly assigned to either a Yoga exercises group (N=14) or a general exercises group (N=14). Before and after intervention, we assessed pain (ordinal) through Visual Analogue Scale, depression (Ordinal) with Beck Depression Inventory II, lumbar lordosis (degree) with flexible ruler, range of lumbar flexion (centimeter) using Modified Schober test, and disability (ordinal) with The Oswestry Disability Index. A 16 session's exercise program which lasted 8 weeks, twice per week, and 45 minutes per session was performed for both groups.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201109181675N7**

Registration date: **2011-11-22, 1390/09/01**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2011-11-22, 1390/09/01

Registrant information

Name

Asghar Akbari

Name of organization / entity

Zahedan University of Medical Sciences

Country

Iran (Islamic Republic of)

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+98 54 1322 8445

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Recruitment status

Recruitment complete

Funding source

Vice Chancellor for Research of Zahedan University of Medical Sciences

Expected recruitment start date

2010-05-22, 1389/03/01

Expected recruitment end date

2010-12-22, 1389/10/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of Yoga Exercises on Spinal Flexibility, Pain and

Functional Disability in Women with Chronic Lumbar Disk Herniation: A Randomized Controlled Trial study

Public title
Effect of Yoga Exercises on Spinal Flexibility, Pain and Functional Disability in Women with Chronic Lumbar Disk Herniation: A Randomized Controlled Trial

Purpose
Treatment

Inclusion/Exclusion criteria
Inclusion criteria: Radicular LBP for a period of at least 3 months; Participants aged over 18 and less than 80 years old; Appropriateness of exercise in accordance with clinical assessment; Patients who have not been contraindicated from doing exercise based on Physical Activity Readiness Questionnaire; and Patients diagnosed with lumbar disc herniation by specialist and radiography. Exclusion criteria: Patients suspected or confirmed for serious spinal pathology; Suspected or confirmed for pregnancy; Spinal column surgery; Insufficient treatment; Using other therapeutic modalities during the study.

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

Gender
Female

Phase
2

Groups that have been masked
No information

Sample size
Target sample size: **28**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

1

Registry name
No registration

Secondary trial Id
No trial id

Registration date
empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ethics Commitee of Zahedan University of Medical Sciences

Street address
Deputy for Research, Zahedan University of Medical Sciences, Jannat Blvd., Dr. Hesabi Sq., Zahedan.

City
Zahedan

Postal code
987-98155

Approval date
2011-10-30, 1390/08/08

Ethics committee reference number
90-1540

Health conditions studied

1

Description of health condition studied
Chronic Lumbar Disk Herniation

ICD-10 code
M51.1+

ICD-10 code description
Lumbar and Other Intervertebral Disc Disorders with Radiculopathy

Primary outcomes

1

Description
Back pain

Timepoint
Before intervention, 8 weeks after intervention

Method of measurement
Visual Analogue Scale

2

Description
Depression

Timepoint
Before intervention, 8 weeks after intervention

Method of measurement
Beck Depression Inventory II Questionnaire

3

Description
Angle of lumbar lordosis

Timepoint
Before intervention, 8 weeks after intervention

Method of measurement
Flexible ruler

4

Description
Range of lumbar flexion

Timepoint
Before intervention, 8 weeks after intervention

Method of measurement

Modified Schober test

5

Description
Disability
Timepoint
Before intervention, 8 weeks after intervention
Method of measurement
The Oswestry Disability Index

Secondary outcomes

empty

Intervention groups

1

Description
Yoga exercises including 14 specific Yoga exercises: A 16 session's exercise program which lasted 8 weeks, twice per week, and 45 minutes per session.
Category
Rehabilitation

2

Description
General Exercises: Including classic abdominal and back exercises: : A 16 session's exercise program which lasted 8 weeks, twice per week, and 45 minutes per session.
Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
Razmejo-Moghadam Physiotherapy Clinic
Full name of responsible person
Dr. Asghar Akbari
Street address
Dept. of Physiotherapy, School of Rehabilitation Sciences, Razmejo-Moghadam Laboratory, Ayatoallah Kafami St., Zahedan
City
Zahedan

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice Chancellor for Research of Zahedan University of Medical Sciences
Full name of responsible person
Dr. Hamidreza Mahmoudzadeh Sagheb
Street address
Deputy of Research, Zahedan University of Medical Sciences, Jannat Blvd., Dr. Hesabi Sq., Zahedan.
City
Zahedan
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Vice Chancellor for Research of Zahedan University of Medical Sciences
Proportion provided by this source
100
Public or private sector
empty
Domestic or foreign origin
empty
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
empty

Person responsible for general inquiries

Contact
Name of organization / entity
Zahedan University of Medical Sciences
Full name of responsible person
Dr. Asghar Akbari
Position
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Other areas of specialty/work
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Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty