

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

A comparison between the effects of dynamic thoracic stabilization exercise and lumbar on the activity of trunk muscles, pain and disability in women with chronic non-specific low back pain

Protocol summary

Study aim

The aim of this study was to compare the effect of dynamic thoracic stabilization exercise and lumbar on the activity of trunk muscles in women with chronic non-specific low back pain.

Design

Randomized controlled trial, not blinded, 30 women with nonspecific chronic low back pain were selected through non probability sampling method.

Settings and conduct

This not blinded, randomized controlled trial was performed at Zahedan University of Medical Sciences, in 2016.

Participants/Inclusion and exclusion criteria

Age between 18 to 58 years; patients with nonspecific chronic low back pain, no history of musculoskeletal disorders in hip and lower extremities; no history of radicular pain, spinal stenosis, any neurologic sign, systemic infection, cardiovascular and balance disorders, severe deformity of musculoskeletal injury to the leg or medication one week before the test session; not pregnant; no history of diabetes, respiratory disorders, spinal surgery, nerve root pain, severe spinal deformity or disease; no history of metabolic, systemic, inflammatory diseases, arthritis and malignancies.

Intervention groups

Dynamic thoracic stabilization exercise and lumbar stabilization exercise

Main outcome variables

Comparison of activity of trunk muscles, pain and functional disability in dynamic thoracic stabilization exercise group and lumbar stabilization exercise group

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20090210001675N14**

Registration date: **2018-11-30, 1397/09/09**

Registration timing: **retrospective**

Last update: **2018-11-30, 1397/09/09**

Update count: **0**

Registration date

2018-11-30, 1397/09/09

Registrant information

Name

Asghar Akbari

Name of organization / entity

Zahedan University of Medical Sciences

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Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2017-08-23, 1396/06/01

Expected recruitment end date

2017-12-11, 1396/09/20

Actual recruitment start date

2017-09-23, 1396/07/01

Actual recruitment end date

2018-01-20, 1396/10/30

Trial completion date

empty

Scientific title

A comparison between the effects of dynamic thoracic

stabilization exercise and lumbar on the activity of trunk muscles, pain and disability in women with chronic non-specific low back pain

Public title

A comparison between the effects of dynamic thoracic stabilization exercise and lumbar in women with chronic non-specific low back pain

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Inclusion criteria: Nonspecific LBP for a period of at least 3 months; women aged over 18 and less than 55 years old; no history of musculoskeletal disorders in hip and lower extremities; no history of radicular pain, spinal stenosis, any neurologic sign, systemic infection, cardiovascular and balance disorders, severe deformity of musculoskeletal injury to the leg or medication one week before the test session; not pregnant; no history of diabetes, respiratory disorders, spinal surgery, nerve root pain, severe spinal deformity or disease; no history of metabolic, systemic, inflammatory diseases, arthritis and malignancies.

Exclusion criteria:

Patients who were absent more than three consecutive sessions of treatment; patients who doing exercises aggravated their pain; receiving or doing other therapies during the study.

Age

From **18 years** old to **55 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **30**

Actual sample size reached: **30**

Randomization (investigator's opinion)

Randomized

Randomization description

Subjects were randomly assigned into two groups by random draw.

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 Zahedan University of Medical Sciences

Street address

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

City

zahedan

Province

Sistan-va-Balouchestan

Postal code

9816843463

Approval date

2017-03-13, 1395/12/23

Ethics committee reference number

IR. ZAUMS. REC.1395.287

Health conditions studied

1

Description of health condition studied

Chronic non-specific low back pain

ICD-10 code

M54.9

ICD-10 code description

Dorsalgia, unspecified

Primary outcomes

1

Description

Trunk muscles activity

Timepoint

Before intervention and 6 weeks after intervention

Method of measurement

Electromyography

2

Description

Pain

Timepoint

Before intervention and 6 weeks after intervention

Method of measurement

Visual Analogue Scale

3

Description

Functional disability

Timepoint

Before intervention and 6 weeks after intervention

Method of measurement

Oswestery scale

Secondary outcomes

1

Description

no secondary outcome

Timepoint

no secondary outcome

Method of measurement

no secondary outcome

Intervention groups

1

Description

Intervention group: dynamic thoracic stabilization exercise, eighteen training sessions during 6 consecutive weeks, three times per week, 30 or 40 minutes per session including: Twenty minutes for receiving hot pack and TENS and 20 minutes for training the exercises

Category

Rehabilitation

2

Description

Control group: lumbar stabilization exercise, eighteen training sessions during 6 consecutive weeks, three times per week, 30 or 40 minutes per session including: Twenty minutes for receiving hot pack and TENS and 20 minutes for training the exercises

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.

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

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Grant name

Grant code / Reference number

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

Yes

Title of funding source

Zahedan 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

Zahedan University of Medical Sciences

Full name of responsible person

Asghar Akbari

Position

Associate professor

Latest degree

Ph.D.

Other areas of specialty/work

Physiotherapy

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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

Not applicable

Analytic Code

Not applicable

Data Dictionary

Not applicable

Title and more details about the data/document

The whole data after making people unidentifiable can be shared.

When the data will become available and for how long

2 months after publication of the results.

To whom data/document is available

Researchers working in academic and scientific institutions.

Under which criteria data/document could be used

All whole data is available for researchers after making the participants unidentifiable, and any other analysis on the data and any use for research and therapeutic purposes is permitted in this study.

From where data/document is obtainable

Dr. Asghar Akbari Address: Dept. of Physiotherapy, School of Rehabilitation Sciences, Razmejo-Moghadam Laboratory, Ayatoallah Kafami St City: zahedan Country: Iran Postal code:64855-98136 Tel:+98 54 3342 4675 Fax:+98 54 3342 4675 Email: akbari_as@yahoo.co

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

After receiving the message from the person requesting the application, and investigating the terms of the request at the earliest opportunity is the information required to be sent to the individual.

Comments

I do not have