Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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
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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
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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
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Sponsors / Funding sources

1

Sponsor
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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
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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 publishication 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 Adress: 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