

Clinical Trial Protocol

Iranian Registry of Clinical Trials

26 Jun 2026

The effect of stabilization exercise on abdominal muscles activity during static and dynamic postural tasks in the individuals with chronic nonspecific low back pain

Protocol summary

Summary

Main objective of this study is evaluation of the effect of stabilization exercise on abdominal muscles activity during static and dynamic postural tasks in the patients with chronic non specific low back pain. This study is randomized, with control group and randomized control trial. Patients with non specific low back pain will be included if they have experienced the pain at least 3 months prior to the beginning of this study. Patients will be excluded if they have a history of surgery, spine fracture and systematic diseases. Dependent variable is activity of abdominal muscles that will be evaluated with ultrasound unit. Evaluation will be performed before and after 6 weeks exercise therapy

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015010920615N1**

Registration date: **2015-02-16, 1393/11/27**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2015-02-16, 1393/11/27

Registrant information

Name

Nasim Hemati Broujeni

Name of organization / entity

Semnan University of Medical Science

Country

Iran (Islamic Republic of)

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Email address

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Recruitment status

Recruitment complete

Funding source

Semnan University of Medical Sciences

Expected recruitment start date

2015-01-21, 1393/11/01

Expected recruitment end date

2015-06-21, 1394/03/31

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of stabilization exercise on abdominal muscles activity during static and dynamic postural tasks in the individuals with chronic nonspecific low back pain

Public title

The effect of stabilization exercise on abdominal muscles activity in the individuals with chronic non specific low back pain

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: age between 20-50 years; experiencing at least 3 month low back pain without radiation of symptoms below gluteal region. Exclusion criteria: history of spinal surgery; history of spinal fractures; history of systemic or neuromuscular disease; disc herniation with symptoms of sciatic pain; spinal deformity; muscles weakness of lower limbs; reporting HIV; history of drug abuse; having pain intensity lower than three and higher than seven; positional vertigo;

uncorrected visual disorders; any using opioid during tow days ago; pregnancy

Age

From **20 years** old to **50 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **40**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Semnan University of Medical Science

Street address

Semnan University of Medical Science

City

Semnan

Postal code

Approval date

2014-12-16, 1393/09/25

Ethics committee reference number

93/538832

Health conditions studied

1

Description of health condition studied

Non specific chronic low back pain

ICD-10 code

M95-M99

ICD-10 code description

Disorders with musculoskeletal system and connective tissue

Primary outcomes

1

Description

Activity of abdominal muscles

Timepoint

Prior and immediately after exercise therapy

Method of measurement

Ultrasound

Secondary outcomes

1

Description

Automatic activity of abdominal muscles

Timepoint

Prior and immediately after exercise therapy

Method of measurement

Ultrasound

2

Description

Postural stability control

Timepoint

Prior and immediately after exercise therapy

Method of measurement

Biodex Balance System

3

Description

Disability

Timepoint

Prior and immediately after exercise therapy

Method of measurement

Disability questionnaire of Roland-Morris

4

Description

Pain

Timepoint

Prior and immediately after exercise therapy

Method of measurement

Visual analogue scale

5

Description

Fear of movement

Timepoint

Prior and immediately after exercise therapy

Method of measurement

Tempa scale

Intervention groups

1

Description

Intervention in training group: exercise therapy with routine physiotherapy. This intervention is included 10

kinds of stabilization exercises that will be given to the patients in 6 weeks

Category

Treatment - Other

2

Description

Intervention in control group: Routine physiotherapy intervention

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Neuromuscular Rehabilitation Research Center,
Semnan University of Medical Science

Full name of responsible person

Nasim Hemai Broujeni

Street address

Mashahir Square

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Semnan University of Medical Science

Full name of responsible person

Dr Raheb Ghorbani

Street address

Semnan University of Medical Science

City

Semnan

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Semnan University of Medical Science

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

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Full name of responsible person

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MS Student in Physical Therapy

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