Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

The effect of motor control exercises versus back muscle endurance training with kinesio taping on the balance indices in patients with nonspecific chronic low back pain

Protocol summary

Summary

The aim of this study was to compare the effects of the motor control exercises and back muscle endurance exercises with Kinesio taping on balance indices in patients with nonspecific chronic low back pain. This randomized clinical trial was performed in Zahedan University of Medical Sciences, in 2015 2016. 33 Patients with nonspecific chronic low back pain were selected through non probability sampling method. The patients were selected based on following inclusion criteria: no history of vestibular disorders, hip and lower extremity musculoskeletal disorders, cardiovascular disorders, uncorrectable vision problems, and age between 18 to 58 years. Exclusion criteria included: more than three consecutive absences from the treatment sessions, Exercises aggravate patients' pain and receiving or doing other therapies during the study. The subjects were randomly allocated to two groups: motor control Exercises group and back muscle endurance exercises with Kinesio taping group. Each of the two groups received their interventions for 5 weeks and 3 sessions per week. Before and after the period of the interventions, overall, anteroposterior and mediolateral stability indices were measured through the postural stability test of Biodex Balance System.

General information

Acronym

-

IRCT registration information

IRCT registration number: **IRCT201306121675N12**
Registration date: **2016-05-29, 1395/03/09**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2016-05-29, 1395/03/09

Registrant information

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Name of organization / entity
Zahedan University of Medical Sciences
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Recruitment status

Recruitment complete

Funding source

Vice Chancellor for Research of Zahedan University of Medical Sciences

Expected recruitment start date

2015-11-11, 1394/08/20

Expected recruitment end date

2016-03-16, 1394/12/26

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of motor control exercises versus back muscle endurance training with kinesio taping on the balance indices in patients with nonspecific chronic low back pain

Public title

The effect of motor control exercises and back muscle endurance training with kinesio taping on balance of

patients with low back pain

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: age between 18 to 58 years; patients with nonspecific chronic low back pain who their pain improved with rest and got worse during activity; no history of vestibular disorders and musculoskeletal disorders in hip and lower extremities; no history of radicular pain, spinal stenosis, any neurologic sign, systemic infection, cardiovascular and balance disorders, uncorrectable vision problems, 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 **58 years** old

Gender

Both

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: **33**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Randomization: Subjects were randomly assigned into two groups by random draw.

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.

City

Zahedan

Postal code

9816843463

Approval date

2015-11-09, 1394/08/18

Ethics committee reference number

ir.zaums.rec.1394.276

Health conditions studied

1

Description of health condition studied

Nonspecific chronic low back pain

ICD-10 code

M54.9

ICD-10 code description

Dorsalgia, unspecified

Primary outcomes

1

Description

Overall stability index

Timepoint

Before and after the period of the interventions

Method of measurement

Biodex Balance System

2

Description

Anteroposterior stability index

Timepoint

Before and after the period of the interventions

Method of measurement

Biodex Balance System

3

Description

Mediolateral stability index

Timepoint

Before and after the period of the interventions

Method of measurement

Biodex Balance System

Secondary outcomes

empty

Intervention groups

1

Description

Back muscles endurance training with Kinesio Taping group: Fifteen training sessions during 5 consecutive weeks, three times per week, 30 or 40 minutes per session including: Twenty minutes for receiving hot pack and TENS and 10 or 20 minutes for training the exercises

and applying the Kinesio Taping.

Category

Rehabilitation

2

Description

Motor control exercises group: Fifteen training sessions during 5 consecutive weeks, three times per week, 30 or 40 minutes per session including: Twenty minutes for receiving hot pack and TENS and 10 or 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.

City

zahedan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice Chancellor for Research, Zahedan University of Medical Sciences

Full name of responsible person

Dr. Hoshang rafigdost

Street address

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

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, 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

Ph.D in Physiotherapy

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