Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

The effect of resistance and endurance training on pain scale and fat distribution in patients with non specific low back pain

Protocol summary

Summary

In this study, we evaluate the effects of endurance and resistance exercise on changing of pain and also fat distribution in different parts of body. Patients, who are diagnosed as chronic low back pain, are divided in two groups randomly. Both groups receive one common protocol based on educational program. First group will receive common protocol with strengthening, and aerobic exercise and the other group will get common protocol with aerobic exercise. Common protocol includes educational program with core stability exercise (stretching exercise). All patients will be evaluated at first, three months and six months later. Assessments will be done in this manner: pain will be evaluated based on VAS, and fat distribution will be assessed with body mass analysis. All patients will be supervised every two weeks and their exercise will be progressed based on their fitness.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201103084251N4**
Registration date: **2011-12-26, 1390/10/05**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2011-12-26, 1390/10/05

Registrant information

Name

Haleh Dadgostar

Name of organization / entity

Tehran University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

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Recruitment status

Recruitment complete

Funding source

Tehran University of Medical Sciences

Expected recruitment start date

2011-07-29, 1390/05/07

Expected recruitment end date

2012-12-05, 1391/09/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of resistance and endurance training on pain scale and fat distribution in patients with non specific low back pain

Public title

The effect of resistance and endurance training on pain scale and fat distribution in patients with non specific low back pain

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Age between 20 to 70 years old; New episode of low back pain at least for 12 weeks; unable to do their daily activity at least three weeks. Exclusion criteria: Diagnosed as specific low back pain; history of trauma, infection, tumor, inflammatory diseases, Sciatica, surgery in last six months, diagnosed as cognitive disorder, pregnancy.

Age

From **20 years** old to **70 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **60**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Single blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Deputy of Research, Tehran University of medical sciences

Street address

4th floor of Tehran university centre, Ghods street, Keshavarz Blvd

City

Tehran

Postal code

1417653761

Approval date

2011-11-19, 1390/08/28

Ethics committee reference number

1763, 130, 90 ,ص

Health conditions studied

1

Description of health condition studied

change of pain in low back pain

ICD-10 code

M54.5

ICD-10 code description

low back pain

Primary outcomes

1

Description

Body mass index

Timepoint

6week after bariatric surgery and 3 month after surgery

Method of measurement

BMI = (Weight in Kilograms / (Height in Meters x Height in Meters))

Secondary outcomes

1

Description

muscle strength

Timepoint

after exercise training

Method of measurement

Digital handDaynamometer

2

Description

waist circumference

Timepoint

after exercise training

Method of measurement

by researcher during physical activity

Intervention groups

1

Description

First group: this group will be training aerobic exercise with common treatment protocole one session per two weeks.

Category

Lifestyle

2

Description

Group B: In addition to common treatment protocole, one sessions per two weeks for one hour strength training under the supervision of a medical specialist sports are doing.

Category

Lifestyle

Recruitment centers

1

Recruitment center

Name of recruitment center

Sports medicine clinic in Rasoule Akram hospital

Full name of responsible person

Haleh Dadgostar, MD

Street address

Hazrat Rasool Hospital, Niayesh Ave, Satarkhan Street

City

Tehran

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Deputy of Research of Tehran university of medical sciences
Full name of responsible person
Dr Akbar Fotohi
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4 th floor of Tehran medical university, Ghods street, Keshavarz Blvd
City
Tehran
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Deputy of Research of Tehran 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
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Other areas of specialty/work
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Web page address

Person responsible for updating data

Contact

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