

Clinical Trial Protocol

Iranian Registry of Clinical Trials

06 Jul 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

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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

$BMI = (\text{Weight in Kilograms} / (\text{Height in Meters} \times \text{Height in Meters}))$

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

Street address

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

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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

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**

Rasoule Akram hospital

Full name of responsible person

Haleh Dadgostar, MD

Position

Assistant professor

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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