

Clinical Trial Protocol

Iranian Registry of Clinical Trials

03 Jul 2026

Effect of 12 Weeks Aerobic Exercise and Combination of Aerobic-Resistance Exercise on anthropometric Indices and Functional Capacity in obese Patients after Bariatric Surgery

Protocol summary

Summary

The study is an interventional trial to investigate the effects of 12 weeks exercise on anthropometric indices and functional capacity of obese patients after bariatric surgery. Sixty patients with body mass index equal to or greater than 35 will be included in the trial. The patients will be allocated randomly in the aerobic or aerobic-resistance exercise groups or in the control group. After inclusion of the participants, all of them will receive the standard diet (600-800 Kcal for the first 4-weeks, 800 Kcal for the second 4-weeks and 1000-12000 Kcal for the third 4-weeks) with high protein formula. Outcomes including anthropometric changes and functional aerobic-resistance capacity improvement will be assessed in the beginning of the trial (pre-surgery) and after 12 weeks of the bariatric surgery. Anthropometric measurements include weight, high, body mass index and body composition analysis. The functional capacity includes 12-minute walk run test, chest press and squat. The measurements and data analysis will be applied by blinded educated persons.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201512297903N7**
Registration date: **2016-01-15, 1394/10/25**
Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2016-01-15, 1394/10/25

Registrant information

Name

Zahra Alizadeh

Name of organization / entity

Tehran University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 21 6119 2282

Email address

z_alizadeh@tums.ac.ir

Recruitment status

Recruitment complete

Funding source

Tehran University of Medical Sciences

Expected recruitment start date

2015-12-22, 1394/10/01

Expected recruitment end date

2016-04-20, 1395/02/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of 12 Weeks Aerobic Exercise and Combination of Aerobic-Resistance Exercise on anthropometric Indices and Functional Capacity in obese Patients after Bariatric Surgery

Public title

The effect of bariatric surgery along with exercise on weight reduction

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion: body mass index greater than 35, bariatric surgery, age between 20 to 50 years, without history of

metabolic or cardiovascular or musculoskeletal disease,
Exclusion: pregnancy during the trial, musculoskeletal
problems, taking drugs with effect on appetite or weight.

Age

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

Ethics Committee of Tehran University of Medical
Sciences

Street address

The Center of Tehran University of Medical
Sciences, Ghods St., Keshavarz Blvd.

City

Tehran

Postal code

Approval date

2015-12-19, 1394/09/28

Ethics committee reference number

IR.TUMS.REC.1394.1434

Health conditions studied

1

Description of health condition studied

Obesity

ICD-10 code

(E65, E66,

ICD-10 code description

Endocrine, nutritional and metabolic diseases

Primary outcomes

1

Description

Weight reduction

Timepoint

3 month

Method of measurement

Anthropometry and body composition analysis

Secondary outcomes

1

Description

Aerobic and resistance functional capacity

Timepoint

3 month

Method of measurement

12 minute walk-run aerobic test, 1 repetition maximal
test

Intervention groups

1

Description

surgery, diet and aerobic or aerobic-resistance exercise
in the intervention groups during 3 months

Category

Treatment - Other

2

Description

surgery and diet in the control group during 3 month

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Imam Khomeini Hospital

Full name of responsible person

Street address

City

Tehran

2

Recruitment center

Name of recruitment center

Mostafa Khomeini Hospital

Full name of responsible person

Street address

City

Tehran

3

Recruitment center

Name of recruitment center

Khataam Hospital

Full name of responsible person

Street address

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research, Tehran University of Medical Sciences

Full name of responsible person

Miss Khalilpour

Street address

4th Floor, The Center of Tehran University of Medical Sciences, Ghods St., 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

Vice chancellor for research, 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

Tehran University of Medical Sciences

Full name of responsible person

Zahra Alizadeh

Position

Assistant Professor

Other areas of specialty/work

Street address

No7, Opposite of Shariati Hospital, Ale-Ahmad Highway, Tehran

City

Tehran

Postal code

Phone

+98 21886302278

Fax

Email

z_alizadeh@tums.ac.ir

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity

Tehran University of Medical Sciences

Full name of responsible person

Zahra Alizadeh

Position

Assistant Professor

Other areas of specialty/work

Street address

7

City

No7, Opposite of Shariati Hospital, Ale-Ahmad Highway, Tehran

Postal code

Phone

+98 21886302278

Fax

Email

z_alizadeh@tums.ac.ir

Web page address

Person responsible for updating data

Contact

Name of organization / entity

Tehran University of Medical Sciences

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zahra alizadeh

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No7, Opposite of Shariati Hospital, Ale-Ahmad Highway, Tehran

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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