Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Effect of aerobic training on pulmonary function and systemic inflammation in obese/overweight men

Protocol summary

Summary

The objective of this study is to assess the effect of aerobic training on pulmonary function and systemic inflammation in obese/overweight men. Twenty obese/overweight men will participate in the study. The subjects will be randomly assigned to aerobic intervention or control group. The intervention group will participate in a 12-week aerobic training (three times a week, 60 min/session). The intensity of the exercise program is condition level 12-16 according to the rate of perceived exertion (RPE) [moderate intensity]. Pulmonary function [spirometery] and C-reactive protein (ELISA method) will be measured prior to and after the intervention.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138904263387N2**
Registration date: **2010-07-17, 1389/04/26**
Registration timing: **prospective**

Last update:
Update count: **0**

Registration date

2010-07-17, 1389/04/26

Registrant information

Name
Abbas Saremi
Name of organization / entity
Arak University of Medical Sciences
Country
Iran (Islamic Republic of)
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+98 86 1277 7400
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a-saremi@araku.ac.ir

Recruitment status

Recruitment complete

Funding source

Arak University

Expected recruitment start date

2010-09-11, 1389/06/20

Expected recruitment end date

2010-10-12, 1389/07/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of aerobic training on pulmonary function and systemic inflammation in obese/overweight men

Public title

Effect of aerobic training on pulmonary function and systemic inflammation in obese/overweight men

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: having a stable weight for at least 3 months prior to the study, age more than 20 years, body mass index more than 25, signing informed consent
Exclusion criteria: Smoking, presence of cardio-pulmonary disease or any other major illness, taking medications that could have affect laboratory test re

Age

From **20 years** old to **60 years** old

Gender

Male

Phase

N/A

Groups that have been masked

No information

Sample size
Target sample size: **20**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Arak university

Street address
Arak university, Arak, Iran.

City
Arak

Postal code
009886138156

Approval date
2011-05-11, 1390/02/21

Ethics committee reference number
19213/89/د

Health conditions studied

1

Description of health condition studied
obesity

ICD-10 code
E66.9

ICD-10 code description
Obesity, unspecified

Primary outcomes

1

Description
C-reactive protein

Timepoint
before and after 3 months aerobic training

Method of measurement
By ELISA in blood

2

Description
Pulmonary function

Timepoint
Before and after 3 months aerobic training

Method of measurement
By spirometer

Secondary outcomes

empty

Intervention groups

1

Description
Aerobic training supervised by an exercise physiologist, 50-60 min/d, 3d/wk, for 12 weeks. The training program started at 40-45% of observed maximal heart rate (HRmax) and gradually increased to 80-85% of maximal heart rate by week 12. Aerobic training included treadmill walking/running.

Category
Lifestyle

2

Description
The control group will maintaine their lifestyle as usual.

Category
Lifestyle

Recruitment centers

1

Recruitment center

Name of recruitment center
Arak University

Full name of responsible person
Abbas Saremi

Street address
Iran, Arak, Arak University

City
Arak

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Arak University

Full name of responsible person
Abbas Saremi

Street address
Arak university, Arak, Iran.

City
Arak

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Arak University

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

Arak University

Full name of responsible person

Abbas Saremi

Position

Asistant Professor

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