

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

The Comparison of the Effect of the 8 weeks aerobic and Resistance training on serum concentrations of nsafatin-1, vaspatin, myonectin, omentin and insulin resistance in obese women with diabetes

Protocol summary

Registration timing: **retrospective**

Study aim

The purpose of this study was to investigate the effect of aerobic and resistance training on some of the myokines and Adipokines among obese diabetes women .

Last update: **2018-10-28, 1397/08/06**

Update count: **0**

Registration date

2018-10-28, 1397/08/06

Design

The study design: pre and post test with control group. Among diabetes women (23 to 50 years old) who referred to Shahid Bahonar Hospital in Kerman, after calculating BMI (BMI), 45 were women (BMI > 25) and then are divided into 3 groups: resistance training, endurance training and control group.

Registrant information

Name

Abdolreza Kazemi

Name of organization / entity

Country

Iran (Islamic Republic of)

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Settings and conduct

Place of Practice Protocol: Bahonar Hospital in Kerman and Islamic Azad University of Kerman. Place of Blood Collection and Molecular Cell Tests: Bahonar Hospital in Kerman and Razi Lab

Recruitment status

Recruitment complete

Funding source

Participants/Inclusion and exclusion criteria

Conditions for entering the research: Body mass index > 25 specialist permission to perform the practice protocol performed the practice protocol according to PAR-Q diabetes Conditions for not entering the research: Alcohol consumption Smoking Continuous physical activity Cardiovascular disease High blood pressure

Expected recruitment start date

2015-10-23, 1394/08/01

Expected recruitment end date

2016-02-20, 1394/12/01

Intervention groups

1- resistance training group 2- endurance training group 3- control group

Actual recruitment start date

2015-10-23, 1394/08/01

Actual recruitment end date

2015-11-22, 1394/09/01

Main outcome variables

nsafatin-1, visfatin, lipid profile, myonectin, chemrin, omentin and insulin resistance

Trial completion date

2016-03-19, 1394/12/29

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20180708040399N1**

Registration date: **2018-10-28, 1397/08/06**

Scientific title

The Comparison of the Effect of the 8 weeks aerobic and Resistance training on serum concentrations of nsafatin-1, vaspatin, myonectin, omentin and insulin resistance in obese women with diabetes

Public title

The effects of aerobic and resistance training on some serum Adipokines and myokines in obese diabetes women.

Purpose

Health service research

Inclusion/Exclusion criteria**Inclusion criteria:**

diabetes Body mass index > 25 Permission to performed the practice protocol by a specialist performed the practice protocol according to PAR-Q

Exclusion criteria:

Cardiovascular disease Negative exercise test High blood pressure Deep scars in the limbs Not having written consent

Age

From **23 years** old to **50 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **45**

Actual sample size reached: **45**

Randomization (investigator's opinion)

Randomized

Randomization description

Among the volunteers, diabetes overweight and obese women, 45 were randomly selected and then t were randomly divided: 15 women in resistance training group, 15 women for endurance training group and 15 diabetes overweight and obese women will be selected as the control group.

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**

Kerman University of Medical Sciences

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City

Kerman

Province

Kerman

Postal code

158257842

Approval date

2016-02-20, 1394/12/01

Ethics committee reference number

IR.KMU.REC.1394.407

Health conditions studied**1****Description of health condition studied**

diabetes

ICD-10 code

E08

ICD-10 code description

Diabetes mellitus due to underlying condition

Primary outcomes**1****Description**

Nisfatin

Timepoint

Before and After 6 Weeks of Exercise training

Method of measurement

ELISA method

2**Description**

Visfatin

Timepoint

Before and After 6 Weeks of Exercise training

Method of measurement

ELISA method

3**Description**

, profile lipid

Timepoint

Before and After 6 Weeks of Exercise training

Method of measurement

ELISA method

4**Description**

Myonectine

Timepoint

Before and After 6 Weeks of Exercise training

Method of measurement

ELISA method

5**Description**

chemerin

Timepoint

Before and After 6 Weeks of Exercise training

Method of measurement

ELISA method

6

Description

omentin-1

Timepoint

Before and After 6 Weeks of Exercise training

Method of measurement

ELISA method

7

Description

Insulin Resistance

Timepoint

Before and After 6 Weeks of Exercise training

Method of measurement

ELISA method

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: 6 Weeks endurance training, No drug is consumed. Do not undergo surgery.

Category

Other

2

Description

Intervention group: 6 Weeks resistance training, No drug is consumed. Do not undergo surgery.

Category

Other

3

Description

Control group: An intervention is not considered.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Kerman Physiology Research Center

Full name of responsible person

Mohammad Pour ranjbar

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Kerman University of Medical Sciences

Full name of responsible person

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Grant name

abas pardakhti

Grant code / Reference number

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

Yes

Title of funding source

Kerman University of Medical Sciences

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

Kerman University of Medical Sciences

Full name of responsible person

Mohammad Pourranjbar

Position

Associate professor

Latest degree

Ph.D.

Other areas of specialty/work

Others

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Person responsible for updating data**Contact****Name of organization / entity**

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Sharing plan**Deidentified Individual Participant Data Set (IPD)**

Undecided - It is not yet known if there will be a plan to make this available

Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan

Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form

Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available