

Clinical Trial Protocol

Iranian Registry of Clinical Trials

12 Jul 2026

The effect of exercise on blood glucose and lipids and glycosilated hemoglobin of diabetic patients

Protocol summary

Summary

The objective of this study was to determine the effects of regular exercise on blood glucose, lipids, and HbA1c in Type 2 diabetes mellitus. A total of 32 patients who were eligible for exercise participated in a special program exercise for 4 weeks; physical training consisted aerobic exercise at 50-70% maximum heart rates, three times per week for 45-50 minutes per session (A.D.A). Blood glucose, lipids level (before and after exercise program), and HbA1c were measured before and 3 months after exercise program and compared between groups.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138811073205N1**
Registration date: **2010-10-24, 1389/08/02**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2010-10-24, 1389/08/02

Registrant information

Name

Azam Ghorbani

Name of organization / entity

Qazvin University of Medical Science

Country

Iran (Islamic Republic of)

Phone

+98 28 1223 7268

Email address

aghorbani@qums.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice-Chancellor For Research, Qazvin University of Medical Sciences

Expected recruitment start date

2009-07-24, 1388/05/02

Expected recruitment end date

2009-10-07, 1388/07/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of exercise on blood glucose and lipids and glycosilated hemoglobin of diabetic patients

Public title

The effect of exercise on blood glucose and lipids and glycosilated hemoglobin of diabetic patients

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Presence of diabetes mellitus type 2, age 30-45, resident in Qazvin Kosar region, without long term diabetic complications, blood glucose less than 250mg/dl Exclusion criteria: not participating regularly in exercise program

Age

From **30 years** old to **45 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **61**

Randomization (investigator's opinion)

N/A

Randomization description

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Single

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Qazvin University of Medical Sciences

Street address
Qazvin

City
Qazvin

Postal code

Approval date
2009-05-02, 1388/02/12

Ethics committee reference number
28/203394

Health conditions studied

1

Description of health condition studied
Diabetes mellitus

ICD-10 code
E11

ICD-10 code description
Non-insulin-dependent diabetes mellitus

Primary outcomes

1

Description
blood glucose level

Timepoint
before and after exercise program

Method of measurement
mg/dl

Secondary outcomes

1

Description
blood lipids level

Timepoint

before and after exercise program

Method of measurement
mg/dl

Intervention groups

1

Description
special program exercise for 4 weeks; physical training consisted aerobic exercise at 50-70% maximum heart rates, three times per week for 45-50 minutes per session (A.D.A)

Category
Prevention

Recruitment centers

1

Recruitment center

Name of recruitment center
Qazvin Minoodar population research center

Full name of responsible person

Street address

City
Qazvin

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Vice-Chancellor For research

Full name of responsible person
Dr Saeed Assefzadeh

Street address
Qazvin

City
Qazvin

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

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

Qazvin University of Medical Sciences

Full name of responsible person

Azam Ghorbani

Position

Master degree

Other areas of specialty/work**Street address**

Qazvin

City

Qazvin

Postal code**Phone**

+98 28 1336 0084

Fax**Email**

aghorbani@qums.ac.ir

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity

Qazvin University of Medical Science

Full name of responsible person

Azam Ghorbani

Position

Master degree

Other areas of specialty/work**Street address**

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+98 28 1336 0084

Fax**Email**

aghorbani@qums.ac.ir

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