

Clinical Trial Protocol

Iranian Registry of Clinical Trials

21 Jul 2026

Effect of aerobic exercise and 25 hydroxy vitamin D supplementation on ratio of GLP1 and DPP4 and Insulin resistance In men with type 2 diabetes

Protocol summary

Summary

Objectives: The objective of this study was to investigate the effect of 8 weeks of aerobic training With and without 25-Hydroxy Vitamin D Supplementation on level of GLP1 and DPP4 Serum, Fasting Blood Sugar, Serum Insulin and Insulin Resistant index in Patients with Type 2 Diabetic.

Design: This research will be pre test-post test with control group design. **Setting and conduct:** Among men 40 to 60 years with type 2 diabetes admitted Jesus, son of Mary Hospital in Isfahan, a number of 48 persons voluntarily and in access choice were put in four groups of Aerobic exercise group (12patients), aerobic exercise with 25-Hydroxy Vitamin D supplementation group(12patients), 25-Hydroxy Vitamin D supplementation group (12patients) and control group(12patients). **Participants including major eligibility criteria:** All men with type 2 diabetes who referred to diabetes admitted Jesus, son of Mary Hospital that number 48 people, has a presence in study, Including Aged 40 to 60 years! Not doing regular physical activity! Do not use Insulin! Lack of complications of diabetes Including Diabetic foot ulcers! Blood glucose less than 250(mg/dl)! HBA1C Less than 8, choice and put in four groups of Aerobic exercise group (12patients), aerobic exercise with 25-Hydroxy Vitamin D supplementation group(12patients), 25-Hydroxy Vitamin D supplementation group (12patients) and control group(12patients). **Intervention:** Exercise program was include 8 weeks (3sessions in week, each session 60-75 minutes, the intensity of exercise was 60 to 80 percent of maximum heart rate). supplemented groups also received 50000 units of oral vitamin D daily for 8 weeks. **main outcome:** Level of GLP1 and DPP4, Fasting Blood Sugar, Serum Insulin and Insulin Resistant

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2017010315812N3**

Registration date: **2017-03-08, 1395/12/18**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2017-03-08, 1395/12/18

Registrant information

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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Bu Ali Sina University in Hamedan

Expected recruitment start date

2017-01-14, 1395/10/25

Expected recruitment end date

2017-03-15, 1395/12/25

Actual recruitment start date

empty

Actual recruitment end date

empty

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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

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