

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jul 2026

The effect of resistance exercise on coronary artery disease risk factors in the patients referred to Isfahan Cardiovascular Research center

Protocol summary

Summary

The aim of present study is investigation the effect of resistance exercise on mean blood pressure in the cardiovascular patients. 40 eligible patients admitted to the rehabilitation unit of Cardiovascular Research center who had hypertension, Coronary artery disease or history of coronary artery bypass graft surgery assigned randomly to intervention and control groups. In every group, one day before the beginning of the intervention, Demographic data was collected. Blood pressure was measured and recorded. Blood sampling was taken for fasting blood sugar and lipid profile measurement. One day after the end of the intervention blood pressure , fasting blood sugar and lipid profile was controlled. During the study period of 8 weeks, all the study subjects participated two exercise sessions last 45-60 minutes, per week. The control group followed routine rehabilitation unit protocol that was aerobic exercise and in the intervention group, in addition to routine exercise, resistance exercise was performed too: at the first session of the intervention, the weight was determined. At the start, the numbers of repetitions in the range of motion were considered 10 repetitions that increased gradually to 15 repetitions. After the each set of 15 repetitions, the amount of weight(3-5 percent) and number of sets raised

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2013022112551N1**

Registration date: **2014-01-15, 1392/10/25**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2014-01-15, 1392/10/25

Registrant information

Name

Zahra Salehi

Name of organization / entity

Isfahan University of Medical Sciences

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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Isfahahan University of medical Sciences , Dr Peyman Adibi

Expected recruitment start date

2013-04-09, 1392/01/20

Expected recruitment end date

2014-01-10, 1392/10/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of resistance exercise on coronary artery disease risk factors in the patients referred to Isfahan Cardiovascular Research center

Public title

effect of Exercise on coronary artery disease risk factors

Purpose

Supportive

Inclusion/Exclusion criteria

inclusion criteria: Patients referring to the Isfahan

Cardiovascular Research center; being pre-hypertensive;stage1 hypertensive ; taking lowering blood pressure drugs; history of myocardial infarction prior 2 months, ten days after coronary angioplasty;3 months after heart bypass surgery Exclusion criteria: Smoking; professional in exercise; participation in an exercise program during the last 3 months; absence for more than three consecutive meetings rehabilitation program; the incidence of acute conditions associated with health; limitations to exercise

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: 40

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**

Isfahahan University of Medical Sciences

Street address

Isfahahan University of Medical Sciences,Hezar Jerib Avenue ,

City

Isfahahan

Postal code**Approval date**

2013-04-30, 1392/02/10

Ethics committee reference number

392058

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

coromary artery disease

ICD-10 code

I25.1

ICD-10 code description

Atherosclerotic heart disease

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

Mean blood pressure

Timepoint

The bigining and the end of the intervention

Method of measurement

Mmhg- Sphygmomanometer

Secondary outcomes**1****Description**

fasting blood sugar

Timepoint

The bigining and the end of the intervention

Method of measurement

Mg/ dl. laboratory measuerments

2**Description**

lipid profile

Timepoint

The bigining and the end of the intervention

Method of measurement

Mg/ dl. laboratory measuerments

Intervention groups**1****Description**

20 eligible subjects assigned randomly to intervention group. In the intervention group, one day before the beginning of the intervention, Demographic data was collected. Blood pressure was measured and recorded. Blood sampling was taken for fasting blood sugar and lipid profile measurement. One day after the end of the intervention blood pressure , fasting blood sugar and lipid profile was controlled. During the study period of 8 weeks, all the study subjects participated two exercise sessions last 45-60 minutes, per week. in the intervention group, in addition to routine exercise, resistance exercise was performed too: at the first session of the intervention, the weight was determined. At the start, the numbers of repetitions in the range of motion were considered 10 repetitions that increased gradually to 15 repetitions. After the each set of 15 repetitions, the amount of weight(3-5 percent) and number of sets raised

Category

Rehabilitation

Description

20 eligible subjects assigned randomly to control group. In the control group, one day before the beginning of the intervention, Demographic data was collected. Blood pressure was measured and recorded. Blood sampling was taken for fasting blood sugar and lipid profile measurement. One day after the end of the intervention blood pressure, fasting blood sugar and lipid profile was controlled. During the study period of 8 weeks, all the study subjects participated two exercise sessions last 45-60 minutes, per week. The control group followed routine rehabilitation unit protocol that was aerobic exercise

Category

Rehabilitation

Recruitment centers**1****Recruitment center****Name of recruitment center**

Isfahan Cardiovascular Research Center

Full name of responsible person

Zahra Salehi

Street address**City**

Isfahahan

Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Isfahahan University of Medical Sciences

Full name of responsible person

Vice chancellor for research, Dr Peyman Adibi

Street address

Isfahahan University of Medical Sciences, Hezar Jerib Avenue ,

City

Isfahahan

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Isfahahan 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**

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Full name of responsible person

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Position

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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