Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

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

Public title

effect of Exercise on coronary artery disease risk factors

Purpose

Supportive

Inclusion/Exclusion criteria

Iinclusion 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

2

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
Isfahan University of Medical Sciences
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Person responsible for scientific inquiries

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Person responsible for updating data

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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