

Clinical Trial Protocol

Iranian Registry of Clinical Trials

16 Sep 2026

Comparison of home-based exercise rehabilitation with centre-based cardiac rehabilitation on lipid parameters, hematology and some behavioral indicators with coronary artery disease

Protocol summary

Summary

In this study, the Comparison of home-based exercise rehabilitation with centre-based cardiac rehabilitation on lipid parameters, hematology and some behavioral indicators with coronary artery disease is studied. Forty male and female patients with CABG or PCI (mean age 59 year) were divided into 3 groups: 1- home-based exercise rehabilitation, 2- centre -based CR and 3- control. Subjects of both home and centre based of cardiac rehabilitation started their activity for 8 weeks, 3 sessions per week about 60-90 minutes, while the control group was only followed-up and during this period they did not experience any exercise. Triglycerides, total cholesterol, high-density lipoprotein and low-density Lipoprotein, Fasting blood sugar, white blood cell, red blood cell, Platelets, Aspartate Aminotransferase, alanine aminotransferase, creatine phosphokinase, alkaline phosphatase, lactate dehydrogenase were measured at baseline and after 2 months of cardiac rehabilitation. The type A behavior, anger, pessimism, anxiety, depression and quality of life variables of patients were measured by standard questionnaires in the beginning and end of eight week exercise rehabilitation.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2014092319272N1**
Registration date: **2015-03-24, 1394/01/04**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2015-03-24, 1394/01/04

Registrant information

Name

Azam Moosavi Sohroforouzani

Name of organization / entity

University of Isfahan

Country

Iran (Islamic Republic of)

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+98 31 5263 8240

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Recruitment status

Recruitment complete

Funding source

Faculty of Physical Education & Sport Science, Isfahan University

Expected recruitment start date

2013-11-21, 1392/08/30

Expected recruitment end date

2014-04-19, 1393/01/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of home-based exercise rehabilitation with centre-based cardiac rehabilitation on lipid parameters, hematology and some behavioral indicators with coronary artery disease

Public title

Home-based exercise rehabilitation and centre-based cardiac rehabilitation

Purpose

Health service research

Inclusion/Exclusion criteria

Inclusion criteria: patients with coronary artery disease after coronary artery bypass graft (CABG) and percutaneous coronary intervention (PCI); 3 months after coronary artery bypass surgery or coronary angioplasty; Surgical repair in patients. Exclusion criteria: Any adverse conditions or obstacles that interfere exercise intervention and assess the effectiveness of the training program is difficult; Diseases such as uncontrolled hypertension, arthritis, respiratory diseases, acute orthopedic problems and musculoskeletal pain were included; regular exercise Before entering the study.

Age

From **45 years** old to **68 years** old

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

Isfahan Cardiovascular Research Institute

Street address

Isfahan Cardiovascular Research Institute, Khoram Avenue

City

Isfahan

Postal code

Approval date

2013-11-22, 1392/09/01

Ethics committee reference number

92117

Health conditions studied

1

Description of health condition studied

coronary artery disease

ICD-10 code

I25.1

ICD-10 code description

Atherosclerotic heart disease

Primary outcomes

1

Description

LDH

Timepoint

The bigining and the end of the intervention

Method of measurement

U/L, Laboratory measurements

2

Description

SGOT

Timepoint

The bigining and the end of the intervention

Method of measurement

U/L, Laboratory measurements

3

Description

SGPT

Timepoint

The bigining and the end of the intervention

Method of measurement

U/L, Laboratory measurements

4

Description

ALK

Timepoint

The bigining and the end of the intervention

Method of measurement

U/L, Laboratory measurements

5

Description

HDL

Timepoint

The bigining and the end of the intervention

Method of measurement

Mg/dl, Laboratory measurements

6

Description

FBS

Timepoint

The bigining and the end of the intervention

Method of measurement

Mg/dl, Laboratory measurements

<u>7</u>	
Description	CBC
Timepoint	The bigining and the end of the intervention
Method of measurement	Laboratory measurements
<u>8</u>	
Description	LDL
Timepoint	The bigining and the end of the intervention
Method of measurement	Mg/dl, Laboratory measurements
<u>9</u>	
Description	Cholesterol
Timepoint	The bigining and the end of the intervention
Method of measurement	Mg/dl, Laboratory measurements
<u>10</u>	
Description	triglyceride
Timepoint	The bigining and the end of the intervention
Method of measurement	Mg/dl, Laboratory measurements
<u>11</u>	
Description	Quality of life
Timepoint	The bigining and the end of the intervention
Method of measurement	Questionnaire SF36
<u>12</u>	
Description	Anxiety
Timepoint	The bigining and the end of the intervention
Method of measurement	Questionnaire S.A.S
<u>13</u>	
Description	Depretion
Timepoint	The bigining and the end of the intervention
Method of measurement	Questionnaire Beck
<u>14</u>	
Description	Type A behavior
Timepoint	The bigining and the end of the intervention
Method of measurement	Questionnaire TAB
<u>15</u>	
Description	Systolic blood pressure
Timepoint	The bigining and the end of the intervention
Method of measurement	Mercury sphygmomanometer, mmHg
<u>16</u>	
Description	Diastolic blood pressure
Timepoint	The bigining and the end of the intervention
Method of measurement	Mercury sphygmomanometer, mmHg
Secondary outcomes	
empty	
Intervention groups	
<u>1</u>	
Description	Home-based exercise rehabilitation group: The subjects in this group participated in aerobic and resistance exercise at home for 8 weeks, 3 sessions per week about 60-90 minutes. The Home-based exercise program includes 10 min warm up, 5 min aerobic exercise, 5 min resistance exercise, 25-60 min brisk walking or jogging at an intensity of 11-13 on the Borg scale and 10 min cool down.
Category	Rehabilitation
<u>2</u>	
Description	Centre-based cardiac rehabilitation group: During the study period of 8 weeks, all the study subjects participated 3 exercise sessions last 60-90 minutes, per week. The subjects in this group followed routine rehabilitation unit protocol that was 20 min warm up, 25-60 min aerobic, resistance and flexibility exercise on machines (e.g., treadmill, stationary bike, stepper, AB King Pro) at an intensity of 11-13 on the Borg scale and 10 min cool down.
Category	Rehabilitation

3

Description

control group: the control group was only followed-up and during this period they did not experience any exercise

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Isfahan Cardiovascular Research Institute

Full name of responsible person

Azam Moosavi Sohroforouzani

Street address

City

Isfahan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

University of Isfahan, Faculty of Physical Education & Sport Science

Full name of responsible person

Dr. Fahimeh Esfarjani

Street address

Faculty of Physical Education & Sport Science,
University of Isfahan

City

Isfahan

Grant name

Grant code / Reference number

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

Yes

Title of funding source

University of Isfahan, Faculty of Physical Education & Sport Science

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

University of Isfahan

Full name of responsible person

Azam Moosavi Sohroforouzani

Position

msc student

Other areas of specialty/work

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Person responsible for scientific inquiries

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Web page address	<i>empty</i>
Sharing plan	Informed Consent Form
	<i>empty</i>
Deidentified Individual Participant Data Set (IPD)	Clinical Study Report
<i>empty</i>	<i>empty</i>
Study Protocol	Analytic Code
<i>empty</i>	<i>empty</i>
Statistical Analysis Plan	Data Dictionary
	<i>empty</i>