# Clinical Trial Protocol
# Iranian Registry of Clinical Trials

22 Nov 2026

## Effect of morning-and-evening of an 8-week Cardiac Rehabilitation program on indices, CTnI fat profiles, CRP and platelet among male patients with myocardium infraction

## Protocol summary

**Study aim**
The present study aimed to investigate the effects of cardiac rehabilitation program conducted in either the morning or evening on indices, CTnI , fat profiles, CRP and platelets in MI patients who were at the phase IV (maintenance) of the disease.

**Design**
The subjects of this study are clinical trials with interventional and control groups, two blinds, randomized male population.

**Settings and conduct**
All patients with myocardial infarction referred to Shahid Madani hospital in khorramabad city. sampling method is a randomized categorical method based on inclusion criteria and available criteria. The eligible individuals are divided into subgroups of morning and evening, and subjects under the floor are randomly assigned to four intervention and control groups Will take.

**Participants/Inclusion and exclusion criteria**
Inclusion criteria: history of angioplasty and coronary artery disease, elapsing at least eight weeks of MI. Exclusion criteria: ejection fraction less than 40% and more than 55%, uncontrolled metabolic diseases.

**Intervention groups**
The intervention groups received a based home cardiac rehabilitation, exercise program, and the necessity of continuing the program. The control groups, also performed the usual cardiac rehabilitation program without utilizing exercise program.

**Main outcome variables**
Troponin, C-Reactive Protein, Platelets

## General information

**Reason for update**

**Acronym**

**IRCT registration information**

IRCT registration number: **IRCT20181122041725N3**
Registration date: **2020-10-31, 1399/08/10**
Registration timing: **retrospective**

Last update: **2020-10-31, 1399/08/10**
Update count: **0**

**Registration date**
2020-10-31, 1399/08/10

**Registrant information**

**Name**
Mostafa Dehghani

**Name of organization / entity**

**Country**
Iran (Islamic Republic of)

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**Recruitment status**
**Recruitment complete**

**Funding source**

**Expected recruitment start date**
2019-09-01, 1398/06/10

**Expected recruitment end date**
2019-11-01, 1398/08/10

**Actual recruitment start date**
2020-04-03, 1399/01/15

**Actual recruitment end date**
2020-04-18, 1399/01/30

**Trial completion date**
2020-06-21, 1399/04/01

**Scientific title**
Effect of morning-and-evening of an 8-week Cardiac Rehabilitation program on indices, CTnI fat profiles, CRP and platelet among male patients with myocardium

infraction

**Public title**
The effect of cardiac rehabilitation in patients with myocardial infarction
**Purpose**
Prevention
**Inclusion/Exclusion criteria**
**Inclusion criteria:**
history of angioplasty and coronary artery disease ejection fraction less than 40% and more than 55%
**Exclusion criteria:**
ventricular arrhythmias endocrine diseases
**Age**
From **45 years** old to **60 years** old
**Gender**
Male

**Phase**
N/A
**Groups that have been masked**

- Participant
- Investigator

**Sample size**
Target sample size: **80**
Actual sample size reached: **80**
**Randomization (investigator's opinion)**
Randomized
**Randomization description**
Eligible patients were assigned to the groups through the stratified randomization method. People were first divided into two strata of morning and evening. Then, the subjects were selected from the strata through the block randomization method and divided into the intervention and control groups according to the order of the selected block number and the internal arrangement of blocks. The selected block number by luck. It should be noted that to blind the person who performed the sampling and to prevent the prediction of allocation, the size of the blocks was not written in the protocol.
**Blinding (investigator's opinion)**
Double blinded
**Blinding description**
This study is a double-blind clinical trial, which the patients were unaware of their allocation to the various groups Moreover, the researcher who was collecting various consequences of interventions will not be aware of group allocation.
**Placebo**
Not used
**Assignment**
Parallel
**Other design features**

## Secondary Ids

empty

## Ethics committees

**1**

**Ethics committee**
**Name of ethics committee**
Ethics committee of Lorestan University of Medical Sciences
**Street address**
No. 2, Lorestan University of Medical Sciences., Anooshirvan Rezaei Square
**City**
Korramabad
**Province**
Lorestan
**Postal code**
6813833946
**Approval date**
2020-10-07, 1399/07/16
**Ethics committee reference number**
IR.LUMS.REC.1399.200

## Health conditions studied

**1**

**Description of health condition studied**
Effect of cardiac rehabilitation in myocardial infarction
**ICD-10 code**
I25.1
**ICD-10 code description**
Atherosclerotic heart disease of native coronary artery

## Primary outcomes

**1**

**Description**
Blood indicators
**Timepoint**
Before and after 8 weeks of cardiac rehabilitation
**Method of measurement**
Blood test

**2**

**Description**
Troponin I
**Timepoint**
Before and after 8 weeks of cardiac rehabilitation
**Method of measurement**
Blood test

**3**

**Description**
Cholesterol
**Timepoint**
Before and after 8 weeks of cardiac rehabilitation
**Method of measurement**
Blood test

**4**

**Description**

High-density lipoprotein

**Timepoint**

Before and after 8 weeks of cardiac rehabilitation

**Method of measurement**

Blood test

**5**

**Description**

Low-density lipoprotein

**Timepoint**

Before and after 8 weeks of cardiac rehabilitation

**Method of measurement**

Blood test

**6**

**Description**

Triglyceride

**Timepoint**

Before and after 8 weeks of cardiac rehabilitation

**Method of measurement**

Blood test

## Secondary outcomes

empty

## Intervention groups

**1**

**Description**

Intervention group: The intervention groups (morning and evening) carried out the cardiac rehabilitation walking program. The home cardiac rehabilitation program in this research included walking at home for almost 45-60 min (5-min warm-up, 40- min walking, and 5- min cool-down and stretching exercises).

**Category**

Rehabilitation

## Recruitment centers

**1**

**Recruitment center**

**Name of recruitment center**

Madani hospital city khorramabad

**Full name of responsible person**

Mostafa dehghani

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No. 1, Khairabad Street., Shaghayegh Square

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## Sponsors / Funding sources

**1**

**Sponsor**

**Name of organization / entity**

Khoram-Abad University of Medical Sciences

**Full name of responsible person**

Ebrahim fallahi

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research@lums.ac.ir

**Grant name**

**Grant code / Reference number**

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

Yes

**Title of funding source**

Khoram-Abad University of Medical Sciences

**Proportion provided by this source**

100

**Public or private sector**

Public

**Domestic or foreign origin**

Domestic

**Category of foreign source of funding**

*empty*

**Country of origin**

**Type of organization providing the funding**

Academic

## Person responsible for general inquiries

**Contact**

**Name of organization / entity**

Khoram-Abad University of Medical Sciences

**Full name of responsible person**

Mostafa Dehghani

**Position**

Domestic

**Latest degree**

Ph.D.

**Other areas of specialty/work**

Cardiology

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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)**
Yes - There is a plan to make this available
**Study Protocol**
Yes - There is a plan to make this available
**Statistical Analysis Plan**
Yes - There is a plan to make this available
**Informed Consent Form**
Yes - There is a plan to make this available
**Clinical Study Report**
Yes - There is a plan to make this available
**Analytic Code**
No - There is not a plan to make this available
**Data Dictionary**
No - There is not a plan to make this available
**Title and more details about the data/document**
Only part of the data, such as the original outcome information
**When the data will become available and for how long**
2020
**To whom data/document is available**
Researchers working in academia and academia
**Under which criteria data/document could be used**
Researchers
**From where data/document is obtainable**
Telephone
**What processes are involved for a request to access data/document**
Phone numbers, or email addresses, along with the names and addresses of individuals
**Comments**