Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

clinical trial : The effect of concurrent training on telomere length in patients with myocardial infarction

Protocol summary

Summary

Objectives:Telomeres are structures at the ends of DNA and protect chromosome ends. this study will investigate the effect of concurrent training on telomere length in Patients with Myocardial infarction. Design: this study is a Quasi-experimental pre-post intervention study. Setting and conduct: twenty male patients from Taleghani Hospital selected and randomly will assigned to training group (n=10) or control group (n=10). Training protocol will be eight weeks of concurrent training, 3 time pre week. Blood samples will be taken half hour before first training session and 24 hours after last training session. Inclusion criteria : stable of patient's condition; quitting smoking and alcohol during the study. Exclusion criteria : unstable pectoral angina; decompensated heart failure. Intervention: rehabilitation training (concurrent training). main outcome measures (variables): Telomere length; Telomerase activity; TRF1; TRF2.

General information

Acronym

-

IRCT registration information

IRCT registration number: **IRCT2015112225188N1**
Registration date: **2016-03-21, 1395/01/02**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2016-03-21, 1395/01/02

Registrant information

Name

Behzad Saki

Name of organization / entity

Shahid Beheshti University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 916 361 7803

Email address

b_saki@sbu.ac.ir

Recruitment status

Recruitment complete

Funding source

Investigator

Expected recruitment start date

2014-12-21, 1393/09/30

Expected recruitment end date

2015-03-20, 1393/12/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

clinical trial : The effect of concurrent training on telomere length in patients with myocardial infarction

Public title

Concurrent training and telomere length in patients with myocardial infarction

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria : passing four to eight weeks since occurrence of myocardial infarction; stable of patient's condition; quitting smoking and alcohol during the study. Exclusion criteria : unstable pectoral angina; decompensated heart failure; ventricular arrhythmia; orthopedic problems.

Age

From **50 years** old to **60 years** old

Gender
Male

Phase
2
Groups that have been masked
No information
Sample size
Target sample size: **20**
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
Ethics committee of Shahid Beheshti University of Medical Sciences
Street address
Shahid Beheshti University of Medical Sciences, Daneshjoo Boulevard, Velenjak, Tehran
City
Tehran
Postal code
Approval date
2016-01-24, 1394/11/04
Ethics committee reference number
IR.SBMU.RAM.REC.1394.485

Health conditions studied

1

Description of health condition studied
myocardial infarction
ICD-10 code
121.0
ICD-10 code description
Acute transmural myocardial infarction of anterior wall Transmural infarction (acute)(of): anterior (wall) NOS anteroapical anterolateral anteroseptal

Primary outcomes

1

Description
telomere length
Timepoint
pre-post test
Method of measurement
telomere length- quantitative polymerase chain reaction (qPCR)- t/s

2

Description
Telomerase activity
Timepoint
pre-post test
Method of measurement
Telomerase activity- quantitative polymerase chain reaction (qPCR)- t/s

3

Description
trf1
Timepoint
pre-post test
Method of measurement
trf1-Immunosorbent Assay (ELISA) -pg/ml

4

Description
trf2
Timepoint
pre-post test
Method of measurement
trf1-Immunosorbent Assay (ELISA) -pg/ml

Secondary outcomes

1

Description
-
Timepoint
-
Method of measurement
-

Intervention groups

1

Description
Intervention group: The training group will perform an 8-week exercise training protocol in three sessions per week.
Category
Rehabilitation

2

Description
Control group: The subjects in the control group will continue their daily lives during this period and wont

carry out any exercise training.

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center

Tehran's Taleghani hospital

Full name of responsible person

Amirhossein Abedi Yekta

Street address

Tehran's Taleghani hospital, Daneshjoo Boulevard, Velenjak, Tehran

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shahid Beheshti University

Full name of responsible person

Behzad Saki

Street address

Tehran's Taleghani hospital, Daneshjoo Boulevard, Velenjak, Tehran

City

Tehran

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Shahid Beheshti University

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

Shahid Beheshti University

Full name of responsible person

Behzad Saki

Position

phD

Other areas of specialty/work

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Full name of responsible person

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Web page address

Person responsible for updating data

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Behzad saki

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Web page address

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