Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

Clinical trial effect of time of doing Exercise Test and Circadian Typology (Morningness-Eveningness) on results of exercise test and some of heart risk markers and electrolytes in patient with symptoms of Chronic Stable Angina

Protocol summary

Summary

Objectives: The aim of this study is evaluating the effect of time of day and circadian typology (morning –evening) on exercise test and some heart risk markers in patient with chronic stable angina symptoms. Design: Cardiologist selects 30 volunteers with chronic stable angina symptoms whom recognizing Circadian Typology. Then they fill the Horne–Ostberg Morningness-Eveningness Questionnaire (MEQ) and after that they do exercise tests. Setting performance objectives and conduct performance assessments: The participants do cross overlay two exercise tests in the morning (between 8 to 10 AM) and afternoon (between 3 to 5 PM) with 96 hour interval. All of them checked for blood analyzers in order to evaluate risk markers and electrolytes before and after each exercise test. If they need more care, they will be taken Angiograph operation. Major Inclusion and Exclusion Criteria: In this study, men and women who have symptoms of chronic stable angina and can do exercise tests successfully, qualified to enter the study. But participants who take drugs in medicine and don't need to Angiography will be excluded. Intervention: Doing two exercise tests once in the morning the other one in the afternoon. Main outcome measures (variables) Changing in risk factors (Fibrinogen, Homocysteine, CRP), electrolytes (sodium, potassium, calcium), HR, max Mets, test time, distances, ECG changes.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2017061834616N1**
Registration date: **2017-08-10, 1396/05/19**
Registration timing: **prospective**
Last update:
Update count: **0**

Registration date

2017-08-10, 1396/05/19

Registrant information

Name
Hassan Rajabimoghaddam
Name of organization / entity
Kashan University of Medical Sciences
Country
Iran (Islamic Republic of)
Phone
+98 31 5554 0021
Email address
hrmcardio@gmail.com

Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Kashan University of Medical Sciences

Expected recruitment start date

2017-08-11, 1396/05/20

Expected recruitment end date

2017-09-21, 1396/06/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Clinical trial effect of time of doing Exercise Test and Circadian Typology (Morningness-Eveningness) on results of exercise test and some of heart risk markers and electrolytes in patient with symptoms of Chronic

Stable Angina

Public title
Effect of time of doing exercise test on results of exercise test, Clinical trial effect of time of doing Exercise Test and Circadian Typology (Morningness-Eveningness) on results of exercise test and some of heart risk markers and electrolytes in patient with symptoms of Chronic Stable Angina

Purpose
Diagnostic

Inclusion/Exclusion criteria
Inclusion criteria: Patient with symptoms of chronic stable angina; Non others heart diseases (MI, Cardiomyopathy, Arythmie); and kidney, cancer and breathing diseases; Non taking particular medicine drugs; Non surgery at 6 last months; Non taking multivitamins at 6 last months; No regular activity. Non sudden relative death at exercise Exclusion criteria: Being negative both exercise test results;.Taking special drugs;.Doing exercise ; Unnatural ECG before exercise test; Smoking and Alcohol drinking 24 hours before test

Age
From **50 years** old to **65 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **30**

Randomization (investigator's opinion)
N/A

Randomization description

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Other

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Researching accessorial in media sciences of kashan

Street address
Medical Faculty, University of Medical Sciences, Ravand Boulevard, Kashan

City
Kashan

Postal code
8715988141

Approval date
2017-04-22, 1396/02/02

Ethics committee reference number
IR.KAUMS.REC.1396.18

Health conditions studied

1

Description of health condition studied
Chronic stable angina

ICD-10 code
120.9

ICD-10 code description
Anginal syndrome Ischaemic chest pain

Primary outcomes

1

Description
Sodium

Timepoint
Before and after exercise test

Method of measurement
Mmol.litre. Electrolyte analyzer

2

Description
MET

Timepoint
End of exercise test

Method of measurement
ml.kg.min. Recorded in the system

3

Description
Fibrinogen

Timepoint
Before and after exercise test

Method of measurement
mg/dl. Thrombotimer

4

Description
CRP

Timepoint
Before and after exercise test

Method of measurement
mg.dl.Thrombotimer

5

Description
Blood pressure

Timepoint
Bbefore and after exercise test

Method of measurement
mm.Hg. Recorded in the system

6

Description
Potassium
Timepoint
Before and after exercise test
Method of measurement
mmol.litre. Electrolyte analyzer

7

Description
Calcium
Timepoint
Before and after exercise test
Method of measurement
mmol.litre. Thrombotimer

8

Description
Homocysteine
Timepoint
Before and after exercise test
Method of measurement
µmol/L. Thrombotimer

9

Description
Distance
Timepoint
End of exercise test
Method of measurement
Meter. Recorded in the system

10

Description
ECG
Timepoint
During 0f exercise testing
Method of measurement
Change of ECG. Recorded in the system

11

Description
Heart rate
Timepoint
In During exercise test
Method of measurement
bpm. Recorded in the system

Secondary outcomes

empty

Intervention groups

1

Description
Time of taking exercise test In the morning(8-10 am) In the afternoon(3-5 pm)
Category
Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Exercise test unit, Kashan University of Medical Sciences
Full name of responsible person
Dr Hassan Rajabimoghaddam
Street address
University of Medical Sciences, Ravand Boulevard, Kashan
City
kashan

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice chancellor for research, Kashan University of Medical Sciences
Full name of responsible person
Dr Gholam Ali Hamidi
Street address
Medical Faculty, University of Medical Sciences, Ravand Boulevard, Kashan
City
kashan
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Vice chancellor for research, Kashan 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
Phd Student of Shahid Beheshti university in Tehran
Full name of responsible person
Maryam Mehrabi

Position
Cardiovascular exercise physology
Other areas of specialty/work
Street address
Shahid Beheshti hospital, Ravand Boulevard, Kashan
City
Kashan
Postal code
Phone
+98 31 5434 9353
Fax
Email
Mehrabi.1764@gmail.com
Web page address

Person responsible for scientific inquiries

Contact
Name of organization / entity
Kashan University of Medical Sciences
Full name of responsible person
Dr Hassan Rajabimoghaddam
Position
Interventional Cardiology
Other areas of specialty/work
Street address
Medical Faculty, University of Medical Sciences, Ravand Boulevard, Kashan
City
Kashan
Postal code
Phone
+98 31 5554 0021
Fax
Email
Hrmcardio@gmail.com
Web page address

Person responsible for updating data

Contact
Name of organization / entity
Kashan University of Medical Sciences
Full name of responsible person
Dr Hassan Rajabimoghaddam
Position
Interventional cardiology
Other areas of specialty/work
Street address
Medical Faculty, University of Medical Sciences, Ravand Boulevard, Kashan
City
kashan
Postal code
Phone
+98 31 5554 0021
Fax
Email
Hrmcardo@gmail.com
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